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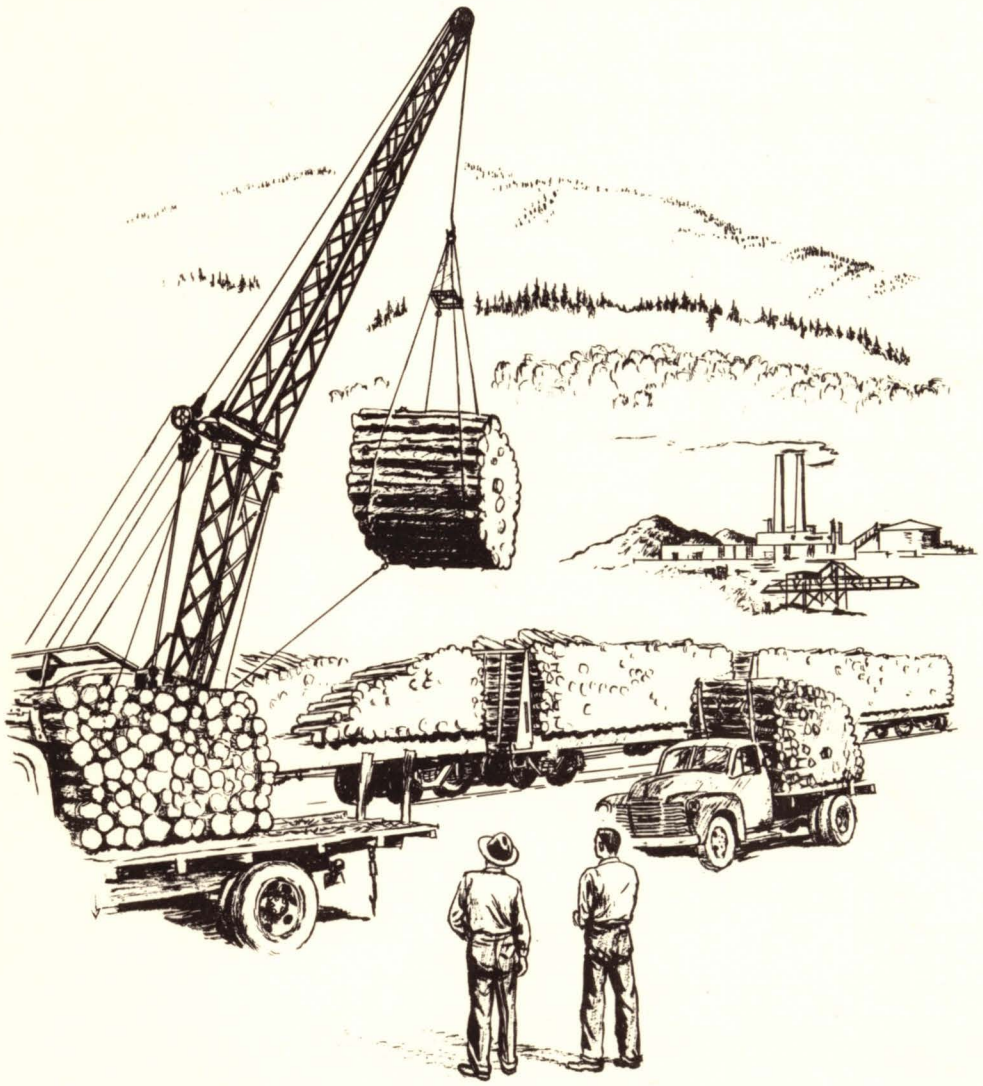
The Demand and Price Situation for Forest Products



FOREST SERVICE AND COMMODITY STABILIZATION SERVICE
U. S. DEPARTMENT OF AGRICULTURE . . . NOVEMBER 1960

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FOREWORD

This report presents information on trends in demand for and prices of forest products for use as background information for the Outlook Conference held by the U. S. Department of Agriculture in November 1960. Major emphasis has been placed on national trends, although some information is presented for regions and individual States. Emphasis has also been placed on the presentation of material that can be used in interpreting the probable effects of changes in the general economic situation on demand for and prices of timber products. Source material on prices and production of timber products and related economic data are listed under Literature Cited.

The analysis of timber products was prepared by Dwight Hair in the Division of Forest Economics Research, Forest Service, and the analysis of naval stores by Herbert B. Wagner in the Tobacco Division, Commodity Stabilization Service.

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OUTLOOK SUMMARY

Timber Products

During the second quarter of 1960, the gross national product reached an annual rate of 505 billion dollars--about 4 billion dollars above the first quarter of the year and 26 billion dollars higher than in 1959. Construction, however, as measured by the value of new construction put in place in 1947-49 prices, was down about a billion dollars from the 1959 level. Most of this reflected a drop in residential construction which at midyear was about 350 thousand units below 1959. Industrial production has remained practically unchanged since December 1959, with the Federal Reserve Index averaging about 166 (1947-49 = 100).

The drop in construction and the stability of industrial production has been associated with a leveling off in demand for timber products. Total production of round timber products in 1960 is estimated at 11 billion cubic feet--slightly below production in 1959. Production of industrial roundwood is expected to amount to 9.5 billion cubic feet and fuelwood 1.5 billion cubic feet.

Stumpage prices at midyear showed a downward trend, largely reflecting weakness in lumber markets. Lumber production for the year is expected to amount to 35 billion board feet--about 5 percent below production in 1959. The West is expected to account for about 55 percent of the lumber produced, the South 32 percent, and the North the remaining 13 percent. Softwoods, chiefly Douglas-fir, southern pine, ponderosa pine, western true firs, and hemlock, will account for about 80 percent of total production.

Lumber imports in 1960 are estimated at 3.8 billion board feet, exports 1 billion board feet, and increases in stocks 1 billion board feet. Total lumber consumption, i.e., domestic production plus net imports less additions to stocks, is thus estimated at 36.7 billion board feet--about 8 percent below consumption in 1959.

Part of this decrease in consumption is due to the decline in construction, but part of it also reflects the continuing substitution of other materials for lumber. Since 1950, for example, per capita lumber consumption has decreased by about 24 percent, while per capita consumption of competing materials such as softwood plywood has increased 156 percent, building board 38 percent, container board 18 percent, and structural steel 5 percent.

This decline in per capita lumber consumption has occurred despite the fact that wholesale prices of most substitute materials have been rising relative to lumber. Since 1950 the wholesale price index of lumber has increased only 9 percent. Meanwhile the wholesale price index of structural steel has increased 65 percent, structural clay products 47 percent, and paperboard 29 percent. Plywood prices, however, decreased 9 percent.

Lumber prices, as measured by the Bureau of Labor Statistics wholesale price index (1947-49 = 100), in July 1960 stood at 121.6--6 percent below the index of 129.9 in July 1959. The available price date on saw logs showed no comparable downward trend.

Pulpwood production in 1960 is estimated at 40 million cords. This represents a new production peak--9 percent above the high reached in 1959. Softwoods, such as southern pine, hemlock, Douglas-fir, spruce, and true fir, account for about 80 percent of the pulpwood produced and hardwoods 20 percent. About 62 percent of total production is in the South, 20 percent in the West, and the remaining 18 percent in the North.

Production of chipped residues obtained from sawmills and veneer mills is estimated at 7 million cords, a new peak in a trend that has been sharply upward since 1944. During the past 4 years, production of pulpwood from residues has increased about 3.5 million cords while production of round pulpwood has increased 1.3 million cords.

Round pulpwood prices have shown some increase in 1960. In the Southeast, for example, prices of rough pine pulpwood at local points of delivery are expected to average $16.50 per cord--about 50 cents above the average in 1959 and a dollar above 1958.

Softwood peeler log production in 1960 is estimated at 3.6 billion board feet--about 5 percent more than in 1959 when 3.4 billion board feet was produced. Production of hardwood veneer logs in 1960 is expected to amount to 1.0 billion board feet--about the same as the annual average since 1950.

Production of other industrial roundwood products, such as cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and miscellaneous products, is estimated at 740 million cubic feet in 1960. Recent trends in production have shown increases for some products, such as poles and piling, and decreases for others, such as mine timbers and cooperage logs.

Consumption of Christmas trees in the United States in 1960 is expected to be somewhat above 40 million trees, with imports from Canada of about 12 million. Prices paid for Christmas trees on the stump have varied widely, but generally range from about 25 cents for wild trees to $2.50 or more for plantation-grown trees. In recent years the acreage of Christmas tree plantations has increased substantially. This suggests the likelihood of increasing competition for available markets in the future.

The outlook for timber products over the next few years depends to a major degree on continuance of growth in gross national product, industrial production, and housing and other construction. With a high level of employment, increases in the use of industrial wood seems likely. Since 1950 pulpwood consumption in the United States has been rising by an average of 2 million cords a year, and recent trends in markets and plans for increases in productive capacity suggest continued growth. Further increases in the consumption of softwood veneer logs are also expected. Lumber consumption, however, is not likely to change much until about the mid-1960's when the upsurge in births that began in the early 1940's is expected to be reflected in an increase in the formation of new households. This should have a favorable effect on residential construction and lumber consumption.

Naval Stores

The disparity between production of and demand for rosin is still evident in 1960, and it has increased prices to unprecedented levels. Although production is expected to be up about 6 percent, greatly reduced carrying stocks result in total supplies about 11 percent less than in 1959. Over-all disappearance is estimated at 9 to 10 percent less than a year ago, and carryout stocks next March 31 are expected to be at an alltime low. Rosin consumption has increased more rapidly abroad than in the United States, a trend that is likely to continue.

The turpentine market situation contrasts sharply with that of rosin. Turpentine production will be slightly lower in 1960 although over-all supplies, boosted by the largest carryin stocks since April 1, 1954, are expected to be about 5 percent greater than in 1959. If, as expected, there is little change in disappearance, carryout stocks should register another increase next March 31. Most of this increase will be in gum turpentine. Under these conditions of supply and utilization, gum turpentine prices are substantially below those of a year ago.

ECONOMIC SITUATION

At the end of the second quarter of 1960 the gross national product, construction, and industrial production were following divergent trends. The most favorable trend was in the gross national product which reached a level of 505 billion dollars--about 4 billion higher than the first quarter of the year and 26 billion higher than 1959 (table 1, fig. 1) (28).[1] Employment was at a record high of 68.7 million people (29). In contrast, the value of new construction put in place, when measured in 1947-49 prices, fell from $38.4 billion to $37.2 billion between 1959 and the second quarter of 1960 (table 1, fig. 2) (26). Most of this decline reflected a drop in residential construction which at midyear was over 350 thousand units below the 1,553 thousand units started in 1959 (table 1, fig. 3). Public expenditures for military facilities and highways also were substantially below the 1959 level. Private expenditures for nonresidential construction, however, showed modest increases, largely for industrial, farm, and public utility building.

Industrial production occupied a middle ground between the increase in the gross national product and the decline in construction. The Federal Reserve Board index of industrial production (1947-49 = 100) in August 1960 stood at 164, not significantly different from the index of 166 in June 1959 and the high of 168 attained in January 1960 (table 1, fig. 4) (2).

[1]Underscored numbers in parentheses refer to Literature Cited, p. 20.

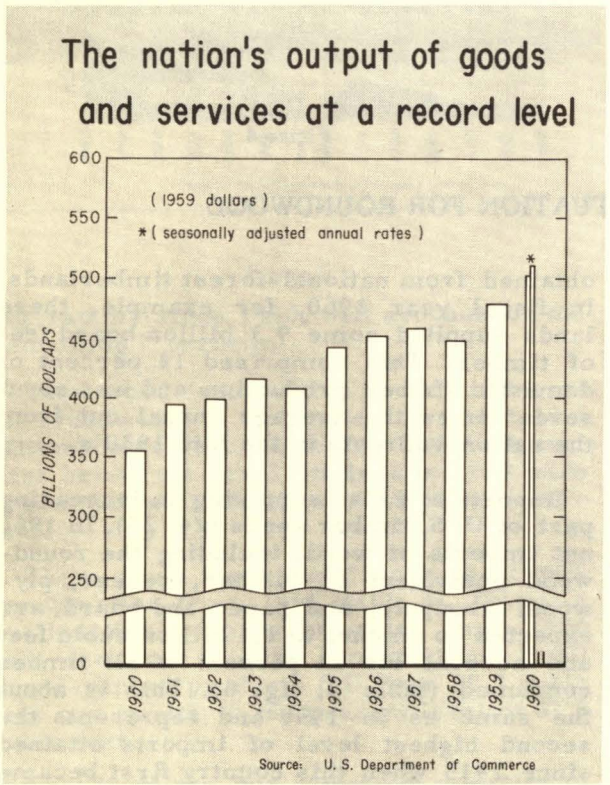
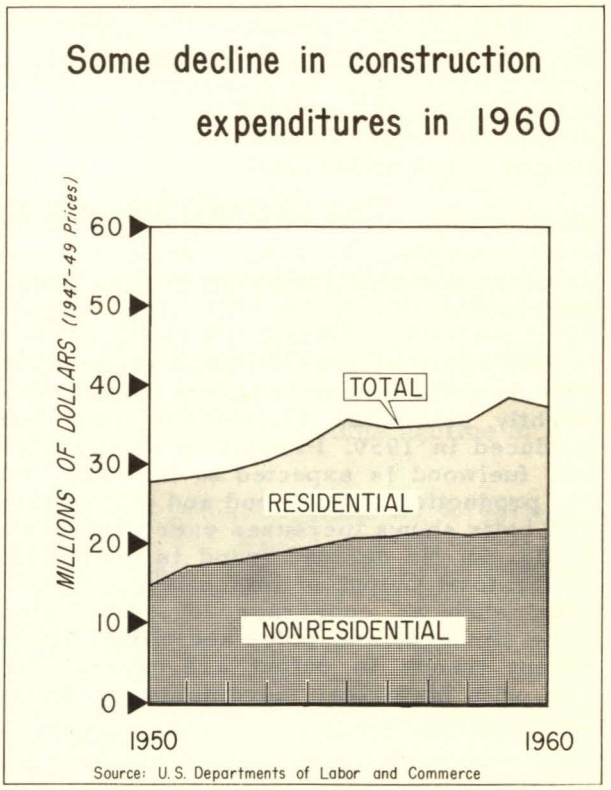


Figure 1



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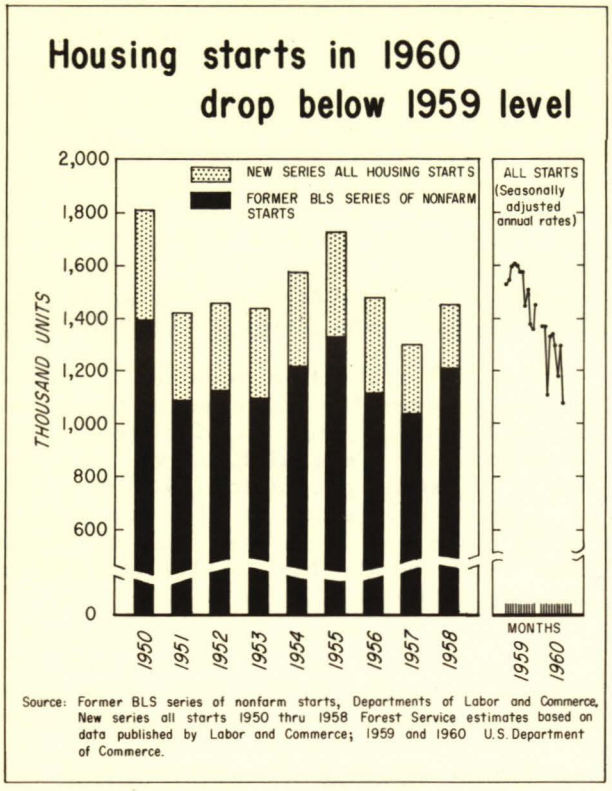

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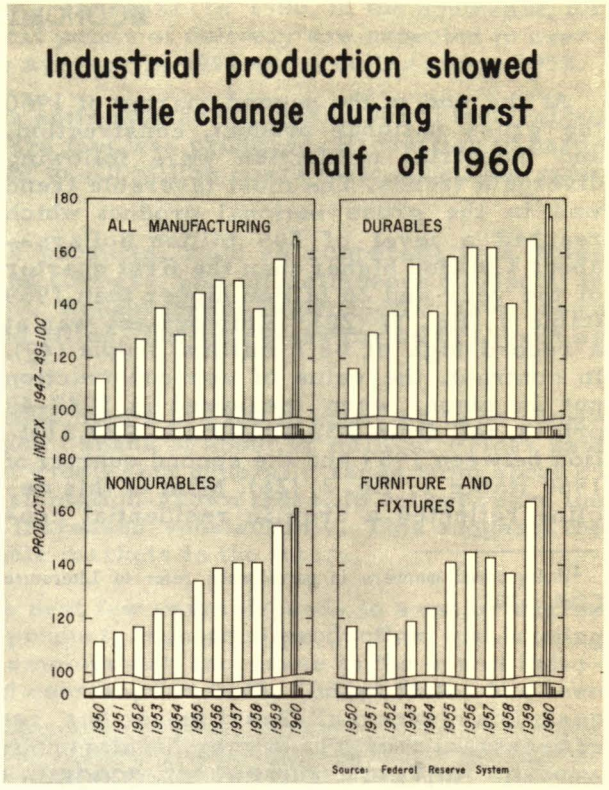

Figure 4

THE DEMAND AND PRICE SITUATION FOR ROUNDWOOD

Roundwood production shows decline from 1959 levels

Production of round-timber products in 1960 is estimated at 11 billion cubic feet--slightly below the 11.2 billion cubic feet produced in 1959. Production of saw logs and fuelwood is expected to be down, but the production of pulpwood and veneer logs and bolts shows increases over 1959 (table 2, fig. 5). No decided trend is anticipated in the total output of miscellaneous products, such as cooperage logs and bolts, mine timbers, and poles and piling. These recent trends in output are generally in line with historical movements, as illustrated in figure 5.

National forests and imports important sources of timber

An increasing proportion of the Nation's supply of round-timber products is being obtained from national-forest timberlands. In fiscal year 1960, for example, these lands supplied some 9.3 billion board feet of timber. This comprised 14 percent of domestic timber production and was about seven times the average annual cut from the national forests in the late 1930's.

Imports are also supplying an increasing part of U. S. timber needs (24, 25). In 1960 net imports of wood, including the roundwood equivalent of lumber, veneer, plywood, woodpulp, and paper and board, are expected to amount to 1.4 billion cubic feet and account for 11 percent of all timber consumed (table 2, fig. 6). This is about the same as in 1959 and represents the second highest level of imports attained since 1915 when this country first became a net importing Nation. Lumber is expected to account for 32 percent of the imports, and newsprint, pulpwood, and other pulp products 61 percent. Veneer and plywood imports, which have been increas-

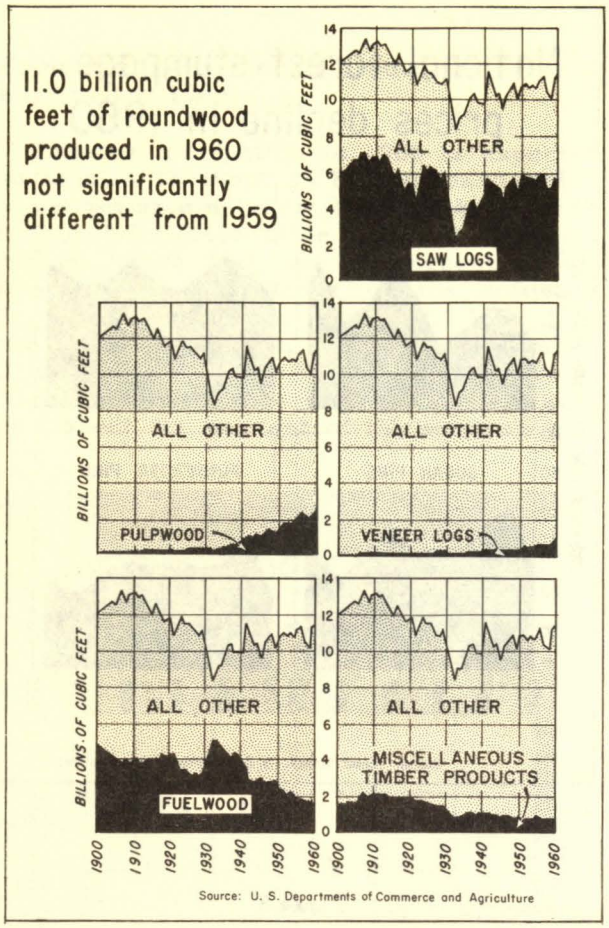

Figure 5

ing rapidly since 1950, will account for the remaining 7 percent.

Total wood consumption in 1960 in terms of roundwood is estimated at about 12.1 billion cubic feet (table 2). This is 4 percent below the level attained in 1959 when consumption amounted to 12.6 billion cubic feet.

There was a 6 percent drop in per capita consumption from 1959 (table 3). This is a continuation of a trend which since 1950 has seen per capita consumption of all round-timber products fall from 80.7 cubic feet per capita to the present level of 67.3 cubic feet.

Trends in the per capita consumption of saw logs, pulpwood, fuelwood, and veneer logs and bolts are illustrated in figure 7. Consumption of saw logs has gradually dropped from 41.7 cubic feet per capita in 1950 to about 31.6 cubic feet in 1960. Fuel-

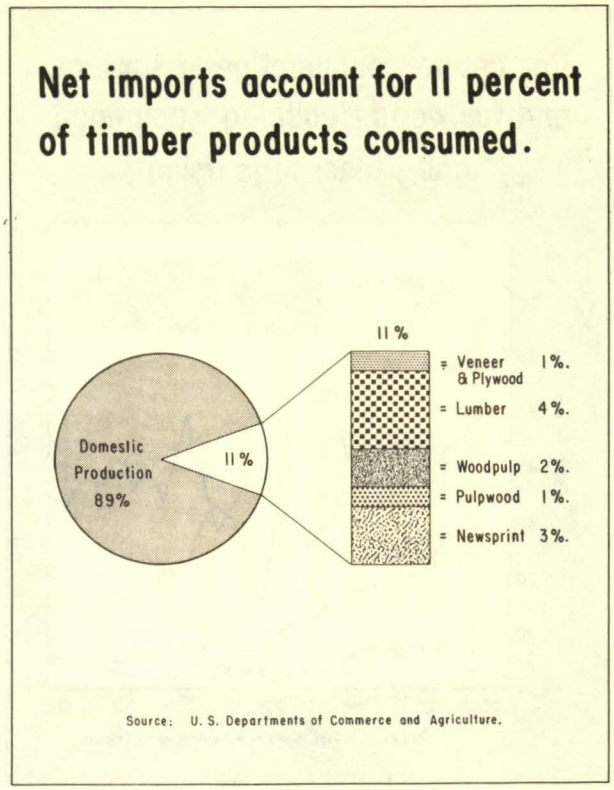
Net imports account for 11 percent of timber products consumed.
11 %
Domestic Production 89%
11 %
= Veneer & Plywood 1%.
= Lumber 4%.
= Woodpulp 2%.
= Pulpwood 1%.
= Newsprint 3%.
Source: U. S. Departments of Commerce and Agriculture.

Figure 6

wood has shown a faster decline, falling from 15.0 cubic feet to 8.3 cubic feet. Per capita use of pulpwood, however, has increased from 16.5 cubic feet to 18.5 cubic feet, and veneer logs from 2.3 cubic feet to 4.8 cubic feet.

Stumpage prices show some decline in 1960

Stumpage prices for national-forest sales of Douglas-fir, southern pine, ponderosa pine, and sugar pine showed some declines during the second quarter of 1960 (table 4, fig. 8) (16). The price of Douglas-fir stumpage averaged $32.30 per thousand board feet compared with $36.80 during 1959. The price of sugar pine stumpage showed a somewhat similar decrease. On the other hand, stumpage prices for southern pine and ponderosa pine showed smaller changes.

Fragmentary data published in a number of State reports on forest product prices (1, 3, 4, 5, 8, 33, 34, 35) suggest that

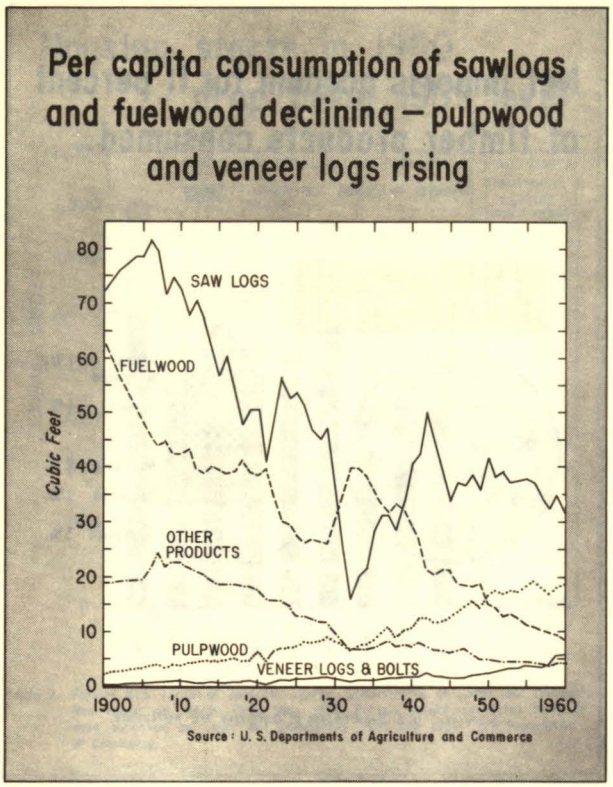

Figure 7

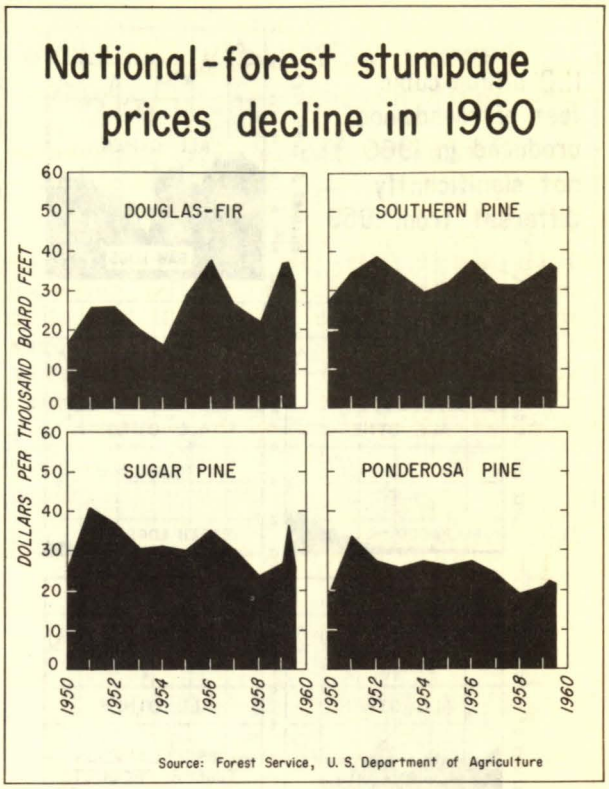

Figure 8

prices of comparable private stumpage have followed similar trends. Illustrative private stumpage prices quoted in recent reports are shown in the following tabulation:

Species	*State and source*	*Price of stumpage per thousand bd. ft.*
Southern pine:		
Saw-log timber	Louisiana (5)	$31.00
Pulpwood timber	do.	4.35
Sweet gum	do.	11.60
White oak	Illinois (4)	15.00 - $40.00
Hard maple	Wisconsin (35)	15.00 - 55.00
Yellow birch	do.	30.00 - 65.00
Yellow-poplar	West Virginia (34)	5.00 - 25.00

Stumpage prices in these reports generally represent timber buyers quotations and are usually presented as a range of prices per thousand board feet without standardized specifications as to grade, log rule, other value factors, and sampling accuracy.

Stumpage is not a homogeneous commodity, and reported prices do not necessarily indicate values for any specific tract of timber. As illustrated in table 5, prices received vary widely among species and regions, and they reflect variations in timber quality, degree of competition, timber accessibility, special costs, or other factors.

Some decline in lumber production expected in 1960

Lumber production in 1960 is expected to amount to about 35 billion board feet--about 5 percent below the 1959 level of 37 billion board feet (table 6, fig. 9). About 19 billion board feet, or 55 percent of all lumber and two-thirds of the softwood lumber produced in 1960, will be cut in the West[3] (table 7, fig. 10). The three Pacific Coast States--Oregon, Washington, and California--are expected to account for about 80 percent of the western cut.

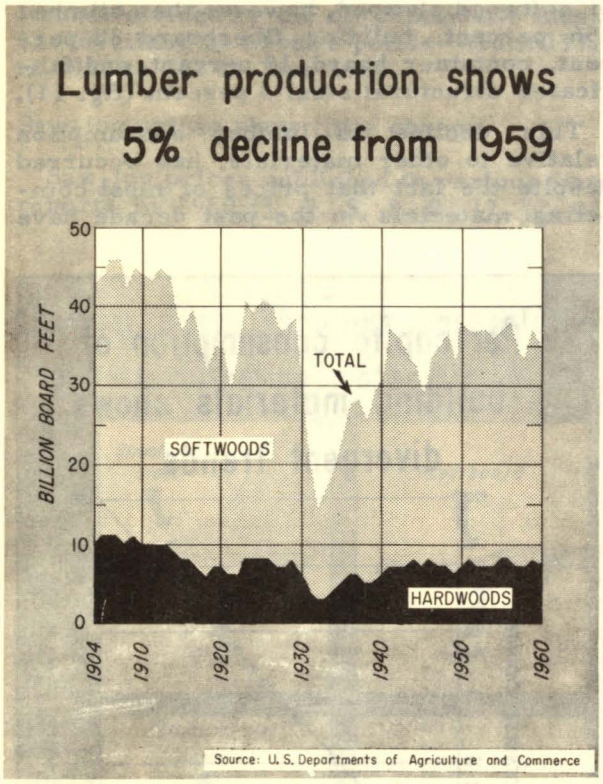

Figure 9

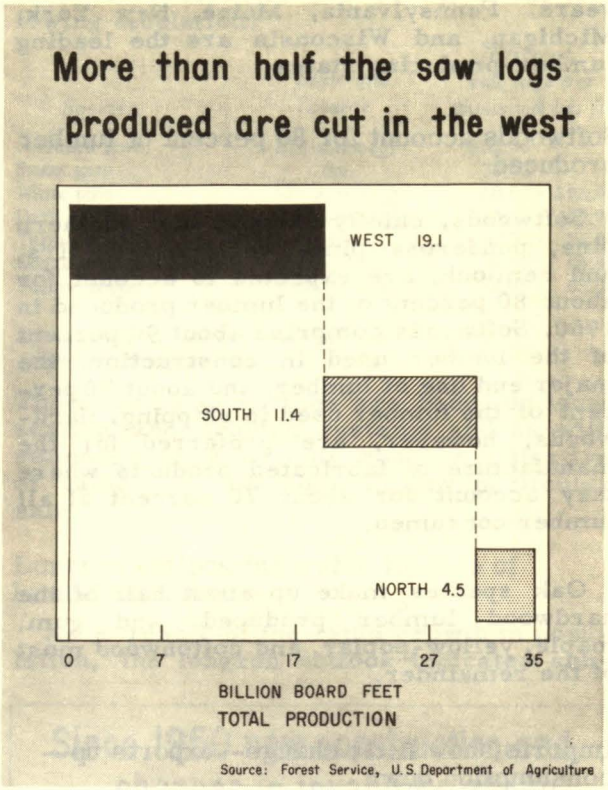

Figure 10

Oregon is the Nation's leading lumber-producing State.

Lumber production in the South in 1960 is expected to amount to about 7.3 billion board feet of softwoods and 4.1 billion board feet of hardwoods. This level of production represents a decline for softwood lumber and an increase for hardwood lumber production over the levels prevailing in the 1940's. The South now accounts for 32 percent of national production, with North Carolina, Georgia, Alabama, Virginia, Arkansas, and Missippippi as the leading producing States.

In contrast to the West, which ships most of its lumber to the northern industrial centers in the East, only 20 percent of the lumber produced in the South is shipped North (18). The rest is consumed locally--about 55 percent in the producing State and 25 percent in neighboring States.

[2] There are no natural data available on saw-log production. However, since saw logs are converted into lumber, data on trends in the demand for and production of lumber apply also to saw logs.

[3] The West includes the 11 Western States and South Dakota. The South consists of the 12 most Southern States, including Virginia. The North includes the remaining 24 States in the continental United States.

Lumber production in the North in 1960 is estimated at 4.5 billion board feet, or slightly below the average for the past 15 years. Pennsylvania, Maine, New York, Michigan, and Wisconsin are the leading lumber-producing States.

Softwoods account for 80 percent of lumber produced

Softwoods, chiefly Douglas-fir, southern pine, ponderosa pine, western true firs, and hemlock, are expected to account for about 80 percent of the lumber produced in 1960. Softwoods comprise about 90 percent of the lumber used in construction, the major end use of lumber, and about 70 percent of the lumber used in shipping. Hardwoods, however, are preferred for the manufacture of fabricated products where they account for about 70 percent of all lumber consumed.

Oak species make up about half of the hardwood lumber produced, and gum, maple, yellow-poplar, and cottonwood most of the remainder.

Imports show little change--exports up--consumption down

Imports of lumber, largely softwoods from Canada, are expected to total 3.8 billion board feet in 1960, or close to the record level of 4.1 billion board feet reached in 1959 (table 6). Exports are expected to show a rise to about 1 billion board feet, the highest level since the postwar peak year of 1947. Lumber stocks are also expected to increase, and by the end of the year they may be about 1 billion board feet higher than at the end of 1959.

When anticipated imports are added to domestic production, and the expected exports and increase in stock subtracted, apparent domestic lumber consumption in 1960 totals about 36.7 billion board feet. This is about 3.2 billion board feet or 8 percent less than in 1959.

Decreased demand for lumber reflects fall in construction activity and continuing substitution

This decrease in consumption of lumber in 1960 largely reflects declines in construction. The fall in residential construction has been particularly important, because it is estimated that this use accounts for roughly 40 percent of all the lumber consumed. Another 35 percent is used in nonresidential construction with the remaining 25 percent about equally divided between fabricated products and shipping.

Part of the decrease in demand for lumber can also be attributed to increasing use of other materials that compete with lumber. Since 1950, a period in which per capita expenditures for new construction (measured in 1947-49 prices) have increased 12 percent and per capita output of industrial goods 23 percent, per capita consumption of lumber has decreased by about 24 percent. Per capita consumption of softwood plywood, however, has climbed 156 percent, building fiberboard 38 percent, container board 18 percent, and fabricated structural steel 5 percent (fig. 11).

This decline in lumber consumption relative to other materials, has occurred despite the fact that prices of most competing materials in the past decade have

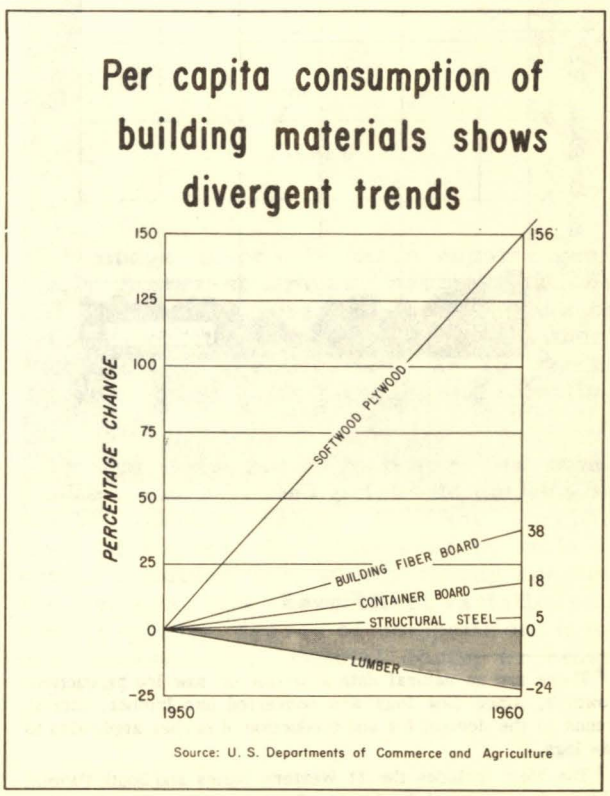

Figure 11

been rising relative to lumber prices (table 8, fig. 12) (30). Since 1950 the wholesale price index of lumber (1947-49 = 100), while fluctuating between a low of 114.5 and a high of 130.4, increased 9 percent. Meanwhile the wholesale price index of structural steel increased 65 percent, structural clay products 47 percent, and paperboard 29 percent. Plywood prices, however, decreased 9 percent. This was the only major competing material whose price declined relative to lumber.

Lumber prices, as measured by the Bureau of Labor Statistics wholesale price index, stood at 121.6 in July 1960--6 percent below the index of 129.9 in July 1959. The "relative" wholesale lumber price index, i.e., the wholesale price index of lumber divided by the all commodity index, has declined by about 8 points--from 111.1 in 1950 to 103 in June 1960.

Saw-log prices show little change

Saw-log prices published in various State reports in 1960 (1, 3, 5, 8, 9, 11, 12, 32, 33, 34, 35) have shown little change from prior years. Illustrative saw-log prices for various species are shown in the following tabulation:

Species	State and source	Price of saw logs per thousand bd. ft.
Southern pine	Louisiana (5)	$52.50
Sweet gum	do.	36.05
White pine	Minnesota (9)	50.00 - $65.00
Hard maple	Wisconsin (35)	[1] 50.00 - 100.00
Yellow birch	do.	[1] 40.00 - 75.00
Douglas-fir (old growth)	Oregon (11)	[2] 35.00 - 65.00
Yellow-poplar	West Virginia (34)	24.00 - 65.00

[1] Woodsrun logs delivered at mill.
[2] Price in Douglas county.

These price quotations are based on local scaling and grading systems and as with stumpage may be only roughly indicative of values of saw logs in any particular sale.

Longrun outlook favorable for use of lumber in housing

As a result of the rapid growth in population, the longrun outlook indicates sub-

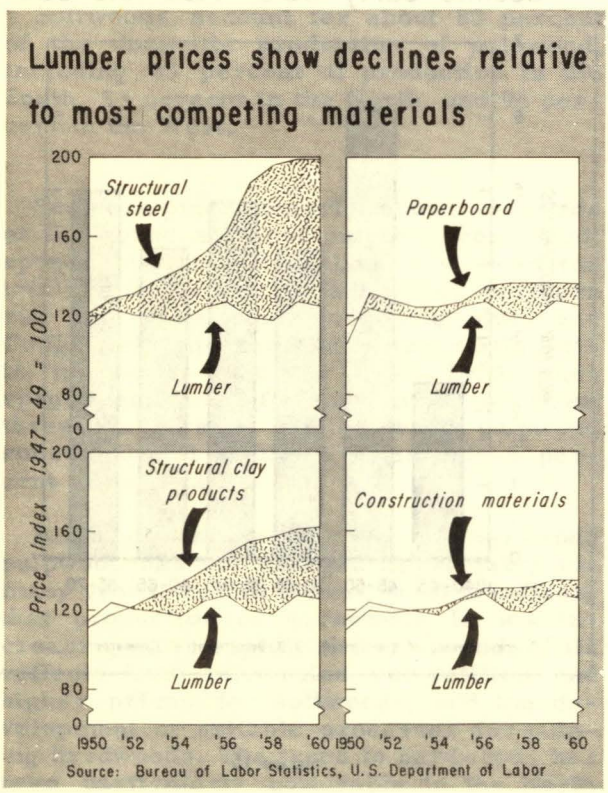

Figure 12

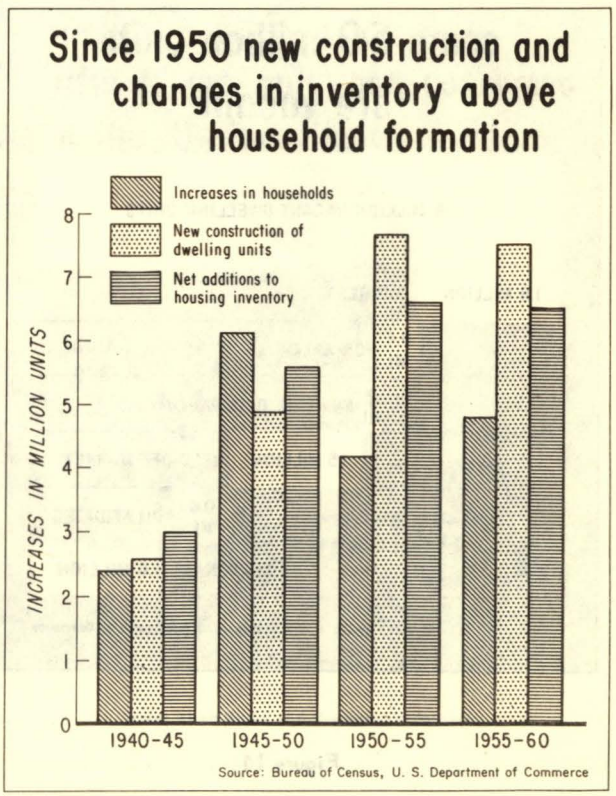

Figure 13

stantial increases in future housing construction. This should have a favorable effect on the demand for lumber and other building materials. Expansion in residential construction may not occur for several years however. As illustrated in figure 13, net increases in the nation's housing inventory since 1950 have been much larger than new household formations. This has resulted in a good supply of housing, as indicated by vacancy rates. Currently, about 10 percent of the housing inventory, or some 5.9 million dwelling units, are vacant (fig. 14). While most of these are classified as "held off the market," "dilapidated," or "seasonal," some 2 million units--about 3 times the number of such units available in 1950--are "for rent or sale."

According to projections of the Bureau of the Census (23), household formations in the period 1960-65 may average 840 thousand units a year (fig. 15). This would be about 125 thousand units less than the average annual increase between 1955 and 1960. By the mid-1960's, however, the upsurge in births that started in the early 1940's is expected to be felt in a rise in the formation of new households and an increase in residential construction (fig. 15). Also, some further impetus to construction may come from an increased rate of replacement of older dwellings and from continued growth in two-dwelling-unit families. Increases in household formation and residential construction should in turn lead to a greater demand for furniture, television sets, shipping containers, and other wood-consuming products.

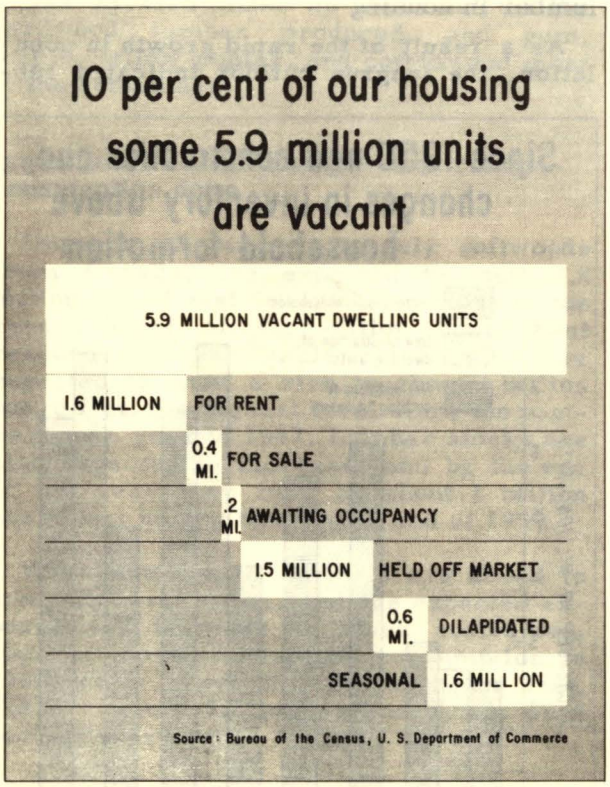

Figure 14

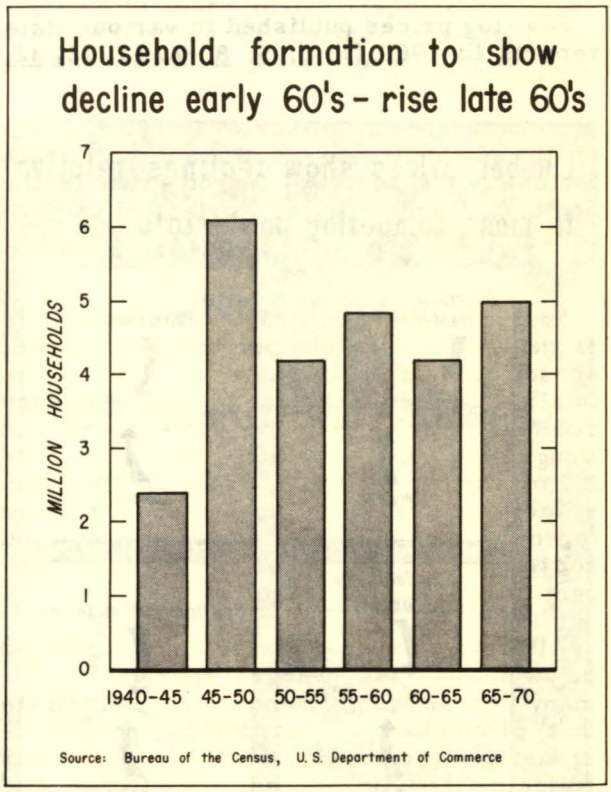

Figure 15

THE DEMAND AND PRICE OUTLOOK FOR PULPWOOD

Pulpwood production to reach peak of 40 million cords

On the basis of trends during the first half of the year, pulpwood production in the U. S. in 1960 is estimated at 40 million cords (table 9). This represents a new production peak--9 percent above the previous high attained in 1959, and 93 percent above production in 1950.

Pulpwood consumption in domestic mills, including net imports of pulpwood from Canada, is estimated at 40.7 million cords (table 10). In addition, it is anticipated that the equivalent of 9.5 million cords of pulpwood will be imported (net imports) in the form of woodpulp and newsprint, and other grades of paper and paperboard. Total consumption in 1960 may thus amount to some 50.2 million cords.

Softwoods preferred for pulpwood

Softwoods account for about 80 percent of the domestic production of pulpwood, including 83 percent of production in the South, 53 percent in the North, and 96 percent in the West.

Southern pines comprise about two-thirds of the round softwood pulpwood consumed; spruce and true firs about a sixth of the total; and hemlock, jack pine, northern red and white pine, lodgepole pine, and Douglas-fir the remaining one sixth. This is markedly different from 1920 when spruce and true fir accounted for about three-quarters of the softwood pulpwood consumed and southern pines only 6 percent of the total.

Although the proportion of hardwood pulpwood has not changed appreciably for many years, recent trends seem to indicate that production of hardwoods is now increasing more rapidly than softwoods. This reflects both intensified competition and higher prices for softwoods, and the development of suitable processes for pulping hardwoods. The trend to hardwoods has been particularly noticeable in the North where for many years stands of preferred spruce and fir have not been adequate to meet the needs of the pulp industry and where large supplies of relatively low-cost hardwoods are available. Most of the increase in demand for hardwoods has been for the less dense species, such as aspen and gum, and relatively little use is being made of the increasing supplies of hard hardwoods, such as oak, hickory, birch and maple, which make up the greater part of eastern hardwood forests.

Chipped mill residues account for 17 percent of the pulpwood consumed

Use of the chipped residues obtained from sawmills, veneer mills, and other plants is expected to reach 7 million cords in 1960 and account for 17 percent of the total pulpwood consumed (table 10, fig. 16). This marks a new peak in a trend that has been sharply upward since 1944. This increasing use of chipped mill residues has

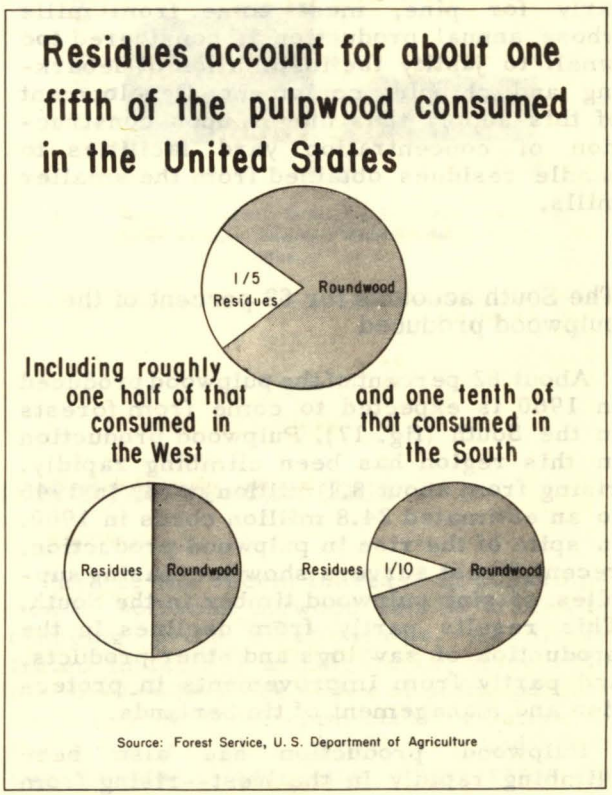
Residues account for about one fifth of the pulpwood consumed in the United States
1/5 Residues
Roundwood
Including roughly one half of that consumed in the West
and one tenth of that consumed in the South
Residues
Roundwood
Residues
1/10
Roundwood
Source: Forest Service, U. S. Department of Agriculture

Figure 16

had a significant effect on the demand for "round" pulpwood. Since 1956, use of residues has increased by an estimated 3.5 million cords, while production of round pulpwood has increased 1.3 million cords.

Residues used for pulpwood in 1960 is expected to include some 6.6 million cords of softwoods and 0.4 million cords of hardwoods. Douglas-fir and other western species account for about two-thirds of the softwood residues used, and Southern pine the remaining one-third.

In the last few years, the increase in the use of residues has been particularly rapid in the South. Since 1953, for example, production of chips from the residues of sawmills and veneer plants in this region has increased from 76 thousand cords to the present level of around 3 million cords. Some further increases are possible, since it is estimated that a total of 4 million cords of pine chips and large volumes of hardwood chips are potentially available from residues each year (15). However, much of this potential, particularly for pine, must come from mills whose annual production is considered too small to justify the installation of debarking and chipping equipment. Development of this supply thus hinges upon construction of concentration yard facilities to handle residues obtained from the smaller mills.

The South accounts for 62 percent of the pulpwood produced

About 62 percent of the pulpwood produced in 1960 is expected to come from forests in the South (fig. 17). Pulpwood production in this region has been climbing rapidly, rising from about 8.1 million cords in 1945 to an estimated 24.8 million cords in 1960. In spite of the rise in pulpwood production, recent forest surveys show increasing supplies of pine pulpwood timber in the South. This results partly from declines in the production of saw logs and other products, and partly from improvements in protection and management of timberlands.

Pulpwood production has also been climbing rapidly in the West--rising from about 2.5 million cords in 1945 to 8.0 million cords in 1960. Residues currently comprise about half the wood used in pulping in this region.

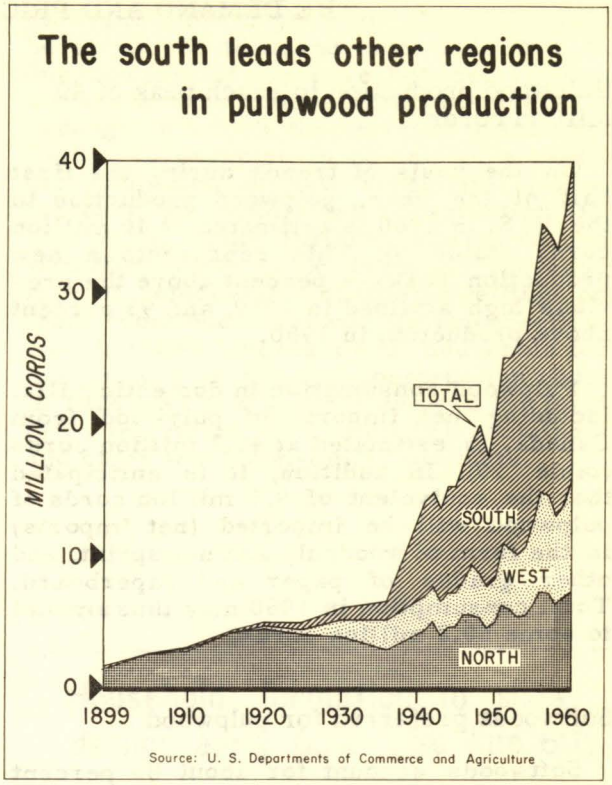

Figure 17

In the North, pulpwood production has climbed rather slowly, rising from 4.7 million cords in 1945 to the 1960 level of 7.2 million cords. Most of the increase has been comprised of hardwoods used in the production of semichemical and related pulps. This increased use of hardwoods has apparently made possible a decrease in pulpwood imports from Canada, which fell from a peak of 2.6 million cords in 1951 to the present level of 1.3 cords.

Pulpwood prices show some increase in 1960

Pulpwood prices at local points of delivery have shown some increase in 1960 (table 11, fig. 18). In the Southeast, prices of rough pine pulpwood during 1960 are expected to average about $16.50 a cord--about 50 cents above the average in 1959 and a dollar above 1958. Pulpwood price increases have been small in relation to increases in production, presumably in part as the result of the increased use of

residues and hardwoods and the widespread installation of wood yards.

Pulpwood prices show considerable variation among regions and species. In the Southeast, for example, prices of rough pulpwood at local points of delivery now average $13.75 for hardwoods. In Wisconsin, prices of rough pulpwood f.o.b. car average about $26.75 per cord for spruce, $18.25 for pine, and $12.00 for aspen. In the Northeast, prices f.o.b. car average about $20.50 per rough cord for spruce and fir and $15.00 for white pine.

Several States publish reports containing price quotations for pulpwood (3, 4, 5, 8, 9, 11, 12, 32, 33, 35). The following tabulation, taken from selected State reports issued in 1960, contains some illustrative pulpwood prices at local points of delivery:

Species	*State and source*	*Price of rough pulpwood per cord*
Southern pine	Louisiana (5)	$14.90
Hardwoods	do.	12.25
Mixed hardwoods	Wisconsin (35)	11.00 - $14.50
Balsam fir	do.	20.50 - 22.50
Spruce	do.	26.00 - 27.50
Pine, Jack and red	do.	17.50 - 19.00
Hardwoods and softwoods	Illinois (4)	[1] 10.00 - 11.00

[1] Delivered at mill.

Further increases in demand for pulpwood expected

The consistent upward trend in the production of pulpwood, which has prevailed during the last 60 years, is expected to continue. As indicated in table 12, there are 16 new woodpulp mills with a daily pulping capacity of about 3,500 tons now under construction or announced. This will mean an increase in total pulping capacity of around 4 percent. Additional capacity may be expected from improvement of facilities at existing mills.

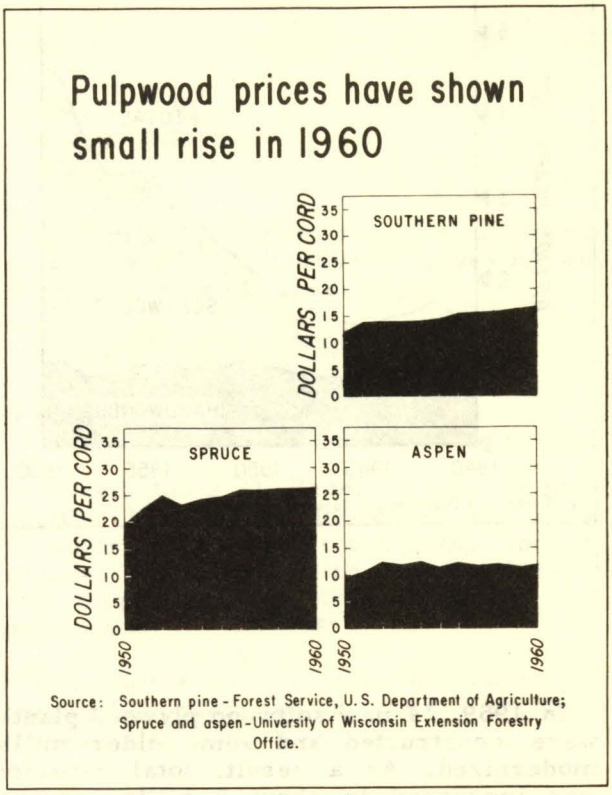

Figure 18

THE DEMAND AND PRICE OUTLOOK FOR VENEER LOGS

Softwood veneer log production up 5 percent in 1960

Production of softwood peeler logs in 1960 is estimated at 3.6 billion board feet, or about 5 percent higher than in 1959 when 3.4 billion board feet were produced (table 13, fig. 19). In the last two decades, production has expanded about seven times, largely reflecting the growing uses for softwood plywood in construction where substitution for lumber has advanced rapidly.

Part of the recent increase in consumption of softwood plywood can be traced to changing price relationships. As illustrated in table 8 and figure 20, since 1950 the wholesale price index of softwood plywood has declined appreciably relative to the price of lumber, paperboard, and other commodities. Increasing wage rates in construction industries have tended to supplement this price advantage since plywood can be put in place with less labor than lumber.

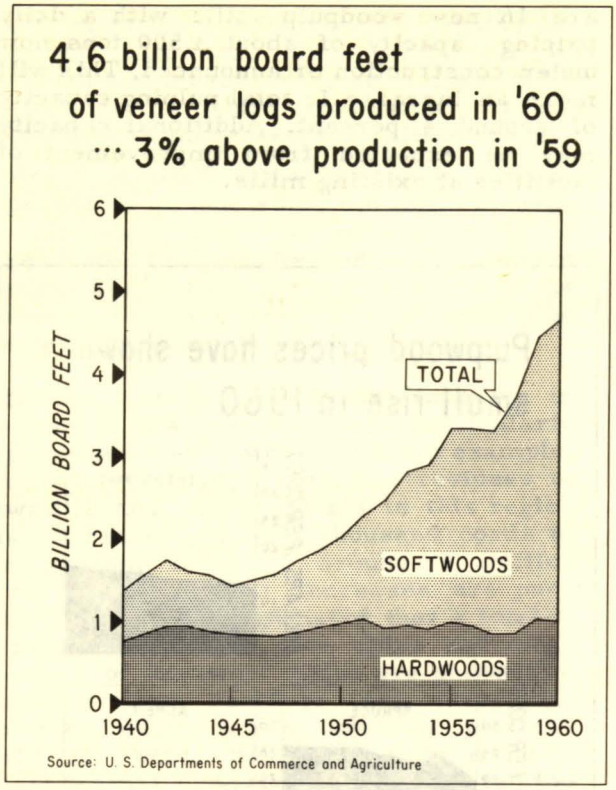

Figure 19

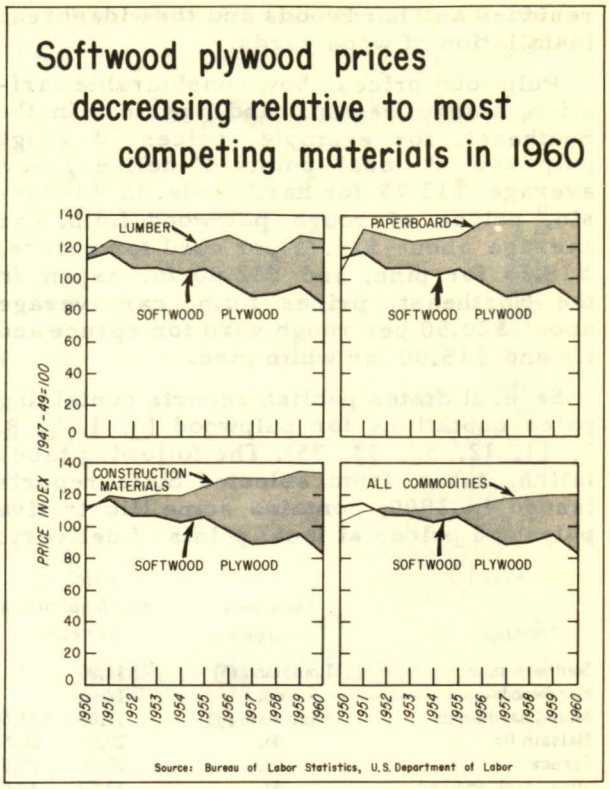

Figure 20

In 1959, 14 new softwood plywood plants were constructed and some older mills modernized. As a result, total capacity was increased to about 8 billion square feet (3/8 basis). Another 11 new plants are scheduled to come into production in 1960. When these are completed, there will be 148 mills in the industry. Nearly all of these mills are located in Oregon, Washington, and California.

In the past, Douglas-fir has comprised from 95 to 98 percent of the logs used for plywood. Significant progress is being made in expanding use of other species.

Little change in output of hardwood veneer logs

Since the early 1950's, there has been little change in the volume of domestic hardwood veneer logs produced, with output averaging about 1.0 billion board feet--the expected level in 1960. Imports of hardwood plywood, however, have increased materially, and in 1960 consumption was roughly twice as high as in 1950. Most of the increased use has been in residential construction, including flush doors and panels that are made largely from hardwood plywood. Between 1947 and 1958, for example production of flush doors increased from a few hundred thousand to more than 15 million.

Luan or Philippine mahogany plywood, because of a beautiful natural appearance, good physical characteristics, and low price in relation to domestic hardwood plywood, has been a favored species for flush doors and interior paneling. Most of the luan plywood consumed has been imported from Japan and the Philippines.

The domestic hardwood veneer and plywood industry, which consists of about 500 mills located in the East, depends upon gum, birch, yellow-poplar, and a wide variety of other hardwood species.

Veneer log price quotations show little change

In August 1960, price quotations for Douglas-fir No. 1 peeler logs ranged between $115 and $120 in the Puget Sound log market and from $124 to $129 in the Columbia River market (13). This general level has been reported without significant change during the last 3 or 4 years.

Reported prices for hardwood veneer logs also have been relatively stable in recent years, although prices by grades and species vary widely. Price reports for yellow birch veneer logs, for example, show a current range of from $150 to $300 f.o.b. mill in Wisconsin, whereas cottonwood and soft elm logs used in the manufacture of veneer for baskets, berry boxes, and other containers average about $50 delivered at mill (35).

Illustrative veneer log prices for various species, which were taken from some of the State reports published in 1960 (1, 3, 8, 11, 12, 32, 33, 35), are as follows:

Species	*State and source*	*Price of veneer logs per thousand bd. ft.*
Hard maple	Wisconsin (35)	[1] $90.00 - $165.00
Yellow birch	do.	[1] 150.00 - 300.00
Douglas-fir	Oregon (11)	[2] 65.00 - 95.00

[1] Delivered at mill.
[2] Price in Douglas county.

These price quotations must be considered as only roughly indicative of values for any particular sale of veneer logs.

DEMAND AND PRICE OUTLOOK FOR OTHER TIMBER PRODUCTS

Production of other industrial roundwood products shows variable trends

Production of industrial roundwood products, such as cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and a miscellaneous assortment of other products, amounted to an estimated 740 million cubic feet in 1960, or about 8 percent of the industrial roundwood produced (table 2). Recent trends in production have shown increases for some products, such as poles and piling, and decreases for others, such as mine timbers and cooperage, with little change in total production.

Illustrative recent price quotations for selected products and species are shown in the following tabulation:

Product	*State and source*	*Unit of measure*	*Price*
Poles:			
Southern pine	Louisiana (5)	30 ft. poles	[1] $2.70 - $3.30
		50 ft. poles	[1] 13.80 - 21.50
		70 ft. poles	[1] 40.60 - 56.50
Cedar	Minnesota (9)	30 ft. poles	[1] 3.40 - 4.00
Piling:			
Jack and red pine	Wisconsin (35)	lineal foot in 50 ft. lengths	[2] 0.40 - 0.45
Posts:			
White cedar	Wisconsin (35)	6" x 10' peeled posts	[1] 0.55 - 1.25
Box and excelsior bolts:			
Aspen	Wisconsin (35)	4'x4'x80" to 100" cord	[3] 12.00 - 19.00
Pine	do.	4'x4'x80" to 100" cord	[3] 15.00 - 25.00

[1] Delivered to yard. [2] At delivery point. [3] Delivered to mill.

Consumption of Christmas trees above 40 million trees

Consumption of Christmas trees in the United States in 1960 is expected to be somewhat above 40 million trees, with imports from Canada about 12 million. This indicates that the demand for Christmas trees from domestic forests and plantations may be about 30 million trees. Prices paid for Christmas trees on the stump vary widely, but generally range from $0.25 for wild trees to $2.50 or more for plantation-grown trees.

In recent years the acreage of Christmas tree plantations has increased substantially. This suggests increasing competition for available markets in the future, and lower prices than growers have been receiving.

THE DEMAND AND PRICE OUTLOOK FOR NAVAL STORES

The outlook for rosin and turpentine offers sharp contrasts with respect to supply, requirements, and price.

Rosin production highest since 1951

Production of rosin during the crop year beginning April 1, 1960, is estimated at nearly 6 percent greater than that for the previous year and the highest since the 1951 crop year. Stimulated by record demand and consequent record high prices, all types of rosin are expected to participate in this increase. Thus, output of gum, steam distilled wood, and tall oil rosin probably will be about 10, 2, and 15 percent higher, respectively, than a year ago. During the current crop year, rosin production will divide percentagewise about 18-60-22 among gum, steam distilled wood and tall oil sources.

Future declines in steam distilled production to be offset by increased gum and tall oil rosin output

The anticipated increase in gum rosin output for 1960 reverses a hitherto unbroken decline from the post World War II peak in 1949. A further and significant increase is likely in the 1961 crop year. During 1960, production was initiated in Western Louisiana, and expansion is planned in 1961. It is likely also that South Carolina will resume gum production in 1961.

In the years ahead, increased supplies of naval stores will be needed to meet long-term growth in requirements. Pine gum farming has the greatest potential for future output expansion. The extent this potential will be developed depends on (1) reduction of production costs including, eventually, the development of faster growing and higher yielding pines, (2) skillful integration of gum farming into forest management and utilization patterns and (3) the level of crude pine gum prices.

Steam distilled wood rosin production reached a peak of 1,369,000 drums in 1955 and has since declined to a plateau of about 1,200,000 drums. The anticipated downward trend in steam distilled wood naval stores output has been postponed temporarily by unprecedentedly high price levels which permit utilization of stumps from areas ordinarily deemed uneconomical. Because of dwindling supplies of appropriate stump wood, the downward trend is likely to be resumed soon and at a rate perhaps more precipitous than anticipated a year ago.

On the basis of projections of probable expansion of softwood sulphate pulp and tall oil fractionating capacity (and the increasing trend in the use of hardwoods), tall oil rosin output during the next 5 years should increase at an annual average of about 5 percent. However, such annual increases will not compensate for the expected decline in steam distilled wood rosin production.

Turpentine output lower in 1960

In contrast to rosin, turpentine production in 1960 is estimated as 5 to 8 percent lower than in 1959. Sulphate turpentine production will be lower partially because some producers have resumed the use of crude sulphate turpentine for fuel since storage space is limited and because of a decline in domestic requirements for in-

dustrial use. Moreover, yields of steam distilled wood turpentine relative to steam distilled rosin are lower this year. Thus, production figures disclose that only 6.7 gallons of steam distilled wood turpentine were produced for each drum of steam distilled wood rosin during April-August 1960 as compared with 7.2 gallons during the same period a year ago and an average of about 8 gallons for the past 10 years. These two factors will more than offset about 7 percent increased output of gum turpentine in 1960.

Record low rosin carryout

Notwithstanding that 1960 rosin production will be the highest in 9 years, supplies of rosin, depressed by a record low carryout, will be the lowest since the 1947 crop year.

Rosin stocks have trended downward since 1952. Soaring requirements during the 1959 crop year resulted in a 251,000 drum carryout, the lowest since March 31, 1947. Moreover, for the first time in 12 years, the carryout last March 31 included no CCC owned or controlled stocks.

Current trends in domestic and export requirements for rosin suggest that carryout stocks next March 31 will be even lower than they were a year earlier and will be the lowest on record (fig. 21). Again, the carryout probably will include no CCC stocks. Less than 1 percent of gum rosin output is expected to be pledged to the 1960 loan and this is likely to be redeemed well in advance of loan maturity next June 30. As of October 3, only 1,341 drums of rosin had been placed in the loan. At the same time last year, pledges approximated 2,000 drums under the 1959 program.

Again, turpentine is in a contrasting position. Although 1960 production of all types of turpentine will be below the 1959 level, increased carryin stocks last April 1 will result in the greatest supply since 1956.

Despite exhaustion of CCC stocks in June 1959, increased output in 1959 coupled with reduced domestic and export requirements reversed the steady down trend in stocks which had been in progress since 1953. The result was the largest carryout last March since March 31, 1954, and a 46 percent increase over the carryout

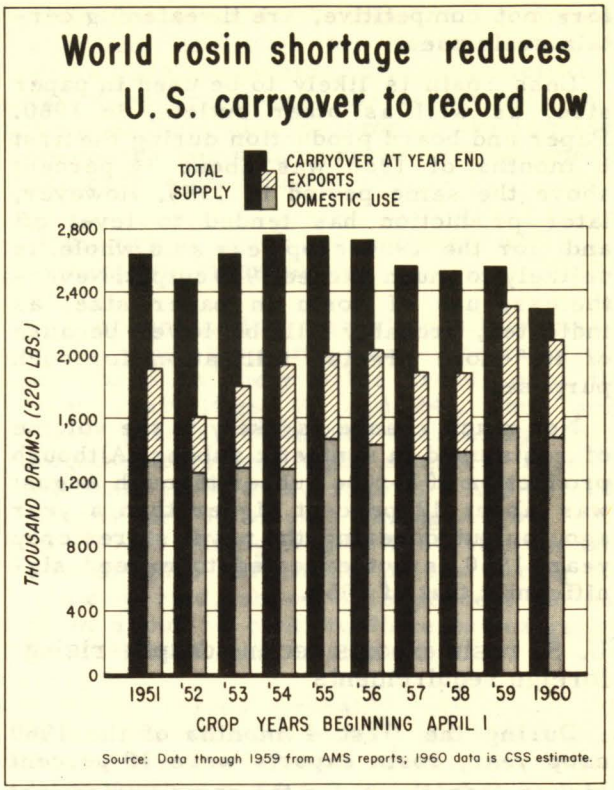

Figure 21

March 31, 1959. Notwithstanding reduced production in 1960, another increase in carryout is expected next March 31. The increase will be mainly in gum turpentine stocks and will reflect pledges of about 35,000 barrels to the 1960 loan (this would represent about 30 percent of the gum turpentine crop and about 6 percent of the production of all types of turpentine.

Rosin disappearance limited by supplies

Rosin supplies during the 1960 crop year are estimated at 2,284,000 drums. Consequently, domestic and export disappearance necessarily will be less than the 2,307,750 drum level of 1959 (the highest, incidentally, since 1950, the year of the Korean War).

The expected reduction in domestic requirements reflects a hesitation in the long-term upward trend of industrial activity, as well as curtailment and, perhaps, some loss in end uses of rosin because of increased cost. Rosin substitutes, hereto-

fore not competitive, are threatening certain rosin uses.

Less rosin is likely to be used in paper size, as well as other outlets, in 1960. Paper and board production during the first 6 months of 1960 was about 3½ percent above the same period in 1959. However, later production has tended to level off and, for the 1960 crop year as a whole, is unlikely to much exceed 1959 output. Nevertheless, use of rosin in paper size, as indicated, probably will be lower because of its more precise utilization for such purpose.

Not much change is likely in the volume of rosin used in synthetic rubber. Although production of S-type rubber through August was about 12 percent higher than a year ago, output covering the naval stores crop year 1960 is not expected to exceed significantly that of 1959.

U. S. rosin exports decline despite rising foreign requirements

During the first 4 months of the 1960 crop year, rosin exports were 15 percent higher than those for the same period last year. In the 1959 crop year, however, 75 percent of rosin exports occurred during the last 8 months. In view of substantial domestic requirements and reduced supplies in 1960, export availabilities are expected to be lower for the year as a whole.

Rosin requirements abroad have been increasing steadily, along with industrial activity. Between 1952 and 1959, foreign consumption of rosin increased about 86 percent as compared with a 21 percent increase in U. S. consumption. While 1952 was featured by low consumption, both domestically and abroad, and 1959 was a year of high domestic and foreign consumption, the comparison nevertheless points up the fact that rosin requirements have increased much more rapidly abroad than in the United States (fig. 22).

In the face of increasing foreign requirements, worldwide rosin export availabilities are expected to be about 10 percent less than a year ago. Principally, this reflects reduced supplies from the United States and France which are expected to more than offset increased availabilities from Portugal, Spain, Greece, and Mexico. Rosin production is expected to be higher

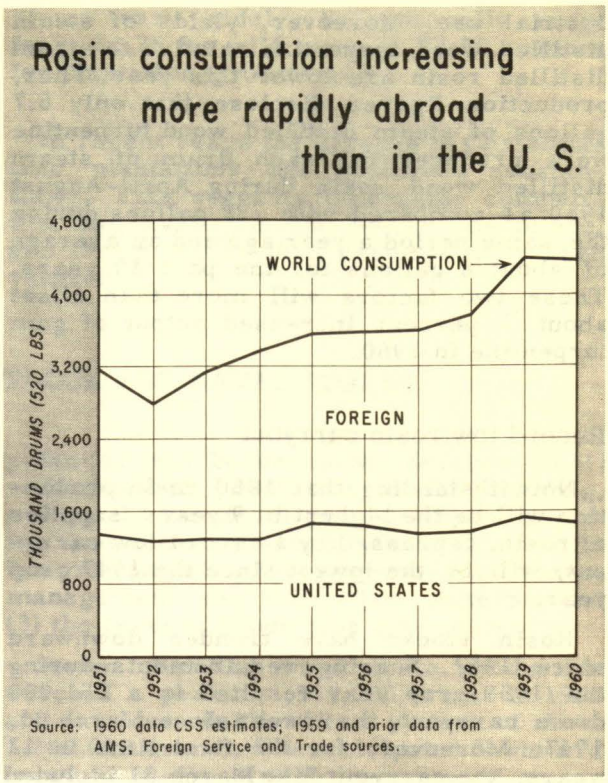

Figure 22

in Portugal (22 percent), Spain (6 percent), Greece (9 percent), and Mexico (8 percent) and unchanged in France. However, export availabilities are not increased proportionately because of lower carryin stocks and increasing home consumption. Based on data through June 1960, the Communist Bloc in the aggregate no longer is on a significant export basis for rosin. The pinch of increasing requirements in these countries is evidenced by recent inquiries in the U. S. and Western Europe for supplies and samples.

Not much change likely in turpentine disappearance

During the first 5 months of the 1960 crop year, disappearance of all types of turpentine was about 2½ percent below that during the same period a year ago, and 5 percent less than the average for the same period during the three crop years 1957-59. The brunt of this reduced disappearance is being borne by gum turpentine in the form of lower exports and domestic movement in small containers.

Disappearance of steam distilled wood turpentine is up about 16 percent from the first 5 months of last year with both exports and domestic utilization participating in the increase. Sulphate turpentine disappearance through August is down 3 percent from last year because of lower domestic usage that more than offsets increased exports. For the crop year as a whole, not much change is anticipated in overall turpentine disappearance.

Increasing merchandising effort to move turpentine into consumption in small containers and into export channels is likely, pending development of new industrial uses through intensive research now in progress. Industrial consumption of turpentine had been increasing since 1948 at the expense of exports and retail sales in small containers. As a result of reduced requirements for synthetic pine oil, the principal outlet especially for sulphate turpentine, industrial usage for turpentine is expected to decline in 1960 for the second consecutive year.

For some time, American Chemical Process industries have been investing on an increasing scale in affiliates and subsidiaries abroad, thus increasing foreign chemical facilities for the upgrading of rosin and turpentine. If, as anticipated, this trend continues, the result may be a progressive shift in comparative requirements for rosin and turpentine from American to foreign industry.

Rosin prices reach record levels while turpentine prices decline

The contrasting marketing situations of rosin and turpentine are spectacularly mirrored in their price trends over the past year (figs. 23 and 24). Thus gum rosin prices, reflecting increasing world requirements and tight supplies, rose 70 percent, from an average of $9.28 per 100 pounds net in drums during August 1959 to $15.76 during August 1960. A comparison of gum turpentine prices during the same period, shows a 15 percent decline from about 54 cents to 46 cents per gallon f.o.b. in tank cars or trucks.

Rosin prices probably will level off within the next few months since each rise intensifies curtailment in use and stimulates further research toward development of new and improved rosin substitutes.

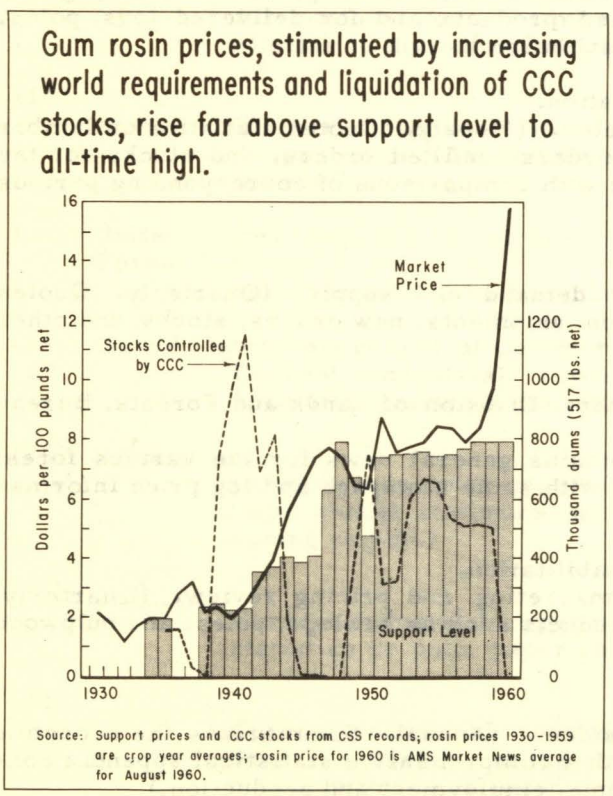

Figure 23

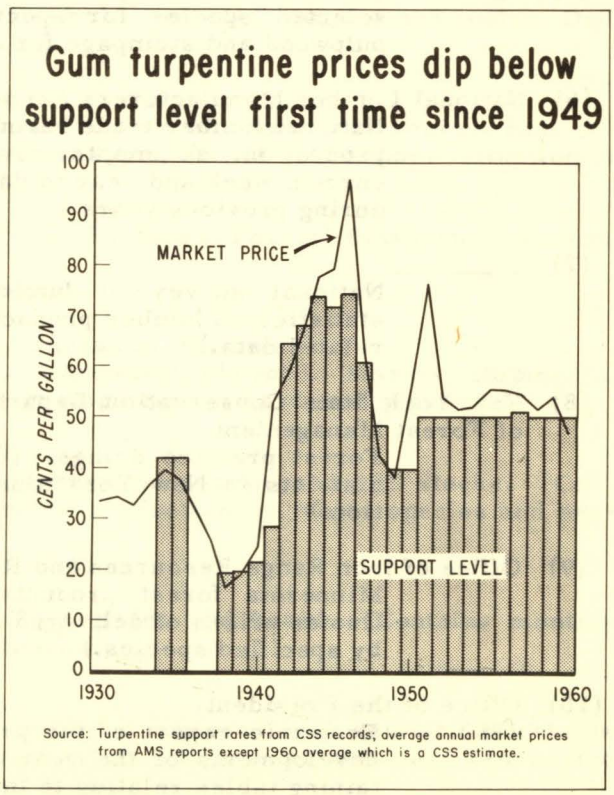

Figure 24

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(28) United States Department of Commerce, Office of Business Economics.
Survey of current business. (Monthly. Contains monthly statistics on the gross national product, national income, personal income and outlays, foreign transactions, government receipts and expenditures, and related business indicators.)

(29) United States Department of Labor, Bureau of Labor Statistics.
Employment and earnings. (Monthly. Contains information on employment, unemployment, hours and earnings, labor turnover by industry and State, and related data.)

(30) _____
Prices and price indexes for individual commodities. (Monthly. Quotes (f.o.b. mill) prices of selected lumber items of important commercial species and plywood, pulp and paper items.)

(31) United States Senate, Select Committee on National Water Resources.
Water resources activities in the United States. (Contains projections of population, gross national product, and land uses for 1980 and 2000.)

(32) Vermont University Extension Forestry Office and United States Department of Agriculture, cooperating.
Forestry work tools. (Bimonthly. Quotes prices of delivered logs and bolts for various species and products in several marketing areas in Vermont.)

(33) Washington State College Department of Forestry and Range Management.
Farm woodland market report. (Monthly. Quotes prices for stumpage and delivered logs in Eastern and Central Washington by species.)

(34) West Virginia Department of Agriculture and others.
West Virginia forest products market information. (Quarterly. Quotes data on saw log and stumpage prices for specified hardwood species.)

(35) Wisconsin University Extension Forestry Office and Wisconsin Conservation Department, cooperating.
Wisconsin forest products review (currently printed in Lake States Timber Digest). (Semiannual. Quotes prices for stumpage, delivered logs and bolts, lumber, railway crossties, piling, poles, and posts.)

APPENDIX

TABLE 1.--Trends in gross national product, expenditures for new construction, number of new housing starts, population and industrial production in the United States, 1929-1960

Year and quarter	Gross national product (1959 prices)	Expenditures for new construction in 1947-49 prices			No. of new housing starts	Population	Index of industrial production (manufacturing)
		Total	Residential	Non-residential			
	Billion dollars	*Million dollars*	*Million dollars*	*Million dollars*	*Thousand units*	*Millions*	*1947-49 = 100*
1929	203.6	20,853	7,250	13,603	--	121.8	--
1930	184.4	17,440	4,261	13,179	--	123.1	--
1931	170.3	13,977	3,486	10,491	--	124.0	--
1932	144.8	8,892	1,658	7,234	--	124.8	--
1933	141.4	6,631	1,237	5,394	--	125.6	--
1934	155.1	7,725	1,515	6,210	--	126.4	--
1935	170.3	9,081	2,528	6,553	--	127.2	--
1936	194.5	13,489	3,899	9,590	--	128.1	--
1937	204.8	13,620	4,224	9,396	--	128.8	--
1938	195.2	13,492	4,219	9,273	--	129.9	--
1939	211.5	16,080	5,615	10,465	--	130.9	--
1940	229.9	16,767	6,308	10,459	--	132.1	--
1941	267.7	21,714	7,216	14,498	--	133.4	--
1942	304.1	22,852	3,935	18,917	--	134.9	--
1943	341.6	12,812	2,695	10,117	--	136.7	--
1944	366.3	8,174	1,573	6,601	--	138.4	--
1945	359.9	8,681	1,928	6,753	--	139.9	--
1946	316.0	16,492	6,595	9,897	--	141.4	--
1947	315.7	19,089	8,233	10,856	--	144.1	99
1948	327.9	22,235	9,784	12,451	--	146.6	103
1949	328.2	23,527	9,831	13,696	--	149.2	97
1950	356.2	27,990	13,340	14,650	--	151.7	113
1951	385.0	28,327	11,307	17,020	--	154.4	123
1952	399.0	29,123	11,322	17,801	--	157.0	127
1953	417.1	30,459	11,824	18,635	--	159.6	139
1954	408.8	32,612	13,058	19,554	--	162.4	129
1955	441.5	35,702	15,291	20,411	--	165.3	145
1956	450.9	34,681	13,873	20,808	--	168.2	150
1957	458.9	34,944	13,286	21,658	--	171.2	150
1958	448.6	35,418	14,192	21,226	--	174.1	139
1959[1]	478.8	[4] 38,436	[4] 16,933	21,503	[5] 1,553	177.1	158
1960[1] [2]	--	--	--	--	--	--	--
First quarter	[3] 501.3	[4] 36,886	[4] 15,273	21,613	[5] [6] 1,282	179.6	166
Second quarter	[3] 505.0	[4] 37,159	[4] 15,113	22,046	[5] [6] 1,332	180.3	165

[1] Preliminary estimates.

[2] Except for population, data shown by quarters are seasonally adjusted annual rates. Expenditures for new construction, number of new nonfarm housing starts, and the index of industrial production are 3-month averages. Population figures are for the month ending each quarter.

[3] Estimates in 1960 dollars.

[4] These data do not reflect the revisions in the housing-start series shown in column 5; revisions of value put in place data to reflect the revised level of housing starts are being prepared by the Bureau of Census.

[5] Data for 1959 and 1960 represent the revised housing-start series published by the Bureau of the Census. No comparable data are available for earlier years.

[6] Private housing starts only.

Source: Gross national product 1929-59 and index of industrial production 1947-59, Office of the President, Economic Report of the President, January 1960 (10).
Gross national product and index of industrial production 1st and 2nd quarters 1960, Board of Governors, Federal Reserve System (2).
Expenditures for new construction 1929-55, Bureau of the Census, U. S. Department of Commerce, Historical Statistics of the United States, 1960.
Expenditures for new construction 1956-60 and number of new housing starts 1959-60, Business and Defense Services Administration, U. S. Department of Commerce (26).
Population, Bureau of the Census, U. S. Department of Commerce.

TABLE 2.--Estimated production, net imports, and new supply of timber products in the United States, 1900-1960

(Million cubic feet, roundwood equivalent)

Year	Total domestic production	Total new supply	Industrial roundwood[1]													Other products[3]	Fuelwood[2]
			Total			Saw logs			Veneer logs			Pulpwood					
			Domestic production	Net imports	New supply[4]	Domestic production	Net imports[5]	New supply[4 6]	Domestic production	Net imports[7]	New supply[4]	Domestic production	Net imports[8]	New supply[4 9]		New supply	New supply
1900.....	12,085	11,940	7,285	* 140	7,140	5,680	* 175	5,505	5	--	5	135	35	170		1,460	4,800
1901.....	12,230	12,120	7,580	* 110	7,470	5,930	* 150	5,780	5	--	5	150	40	190		1,490	4,650
1902.....	12,380	12,320	7,880	* 60	7,820	6,180	* 110	6,070	10	--	10	160	50	210		1,525	4,500
1903.....	12,565	12,425	8,215	* 140	8,075	6,445	* 195	6,255	15	--	15	175	55	230		1,575	4,350
1904.....	12,690	12,540	8,490	* 150	8,340	6,675	* 205	6,470	20	--	20	190	60	250		1,600	4,200
1905.....	12,675	12,585	8,625	* 90	8,535	6,755	* 155	6,600	35	--	35	195	65	260		1,640	4,050
1906.....	13,125	13,030	9,225	* 95	9,130	7,145	* 170	6,975	60	--	60	225	75	300		1,800	3,900
1907.....	13,380	13,265	9,555	* 115	9,440	7,145	* 215	6,930	65	--	65	235	100	335		2,110	3,825
1908.....	12,700	12,620	8,725	* 80	8,645	6,520	* 160	6,360	70	--	70	205	80	285		1,930	3,975
1909.....	13,100	13,050	9,275	* 50	9,225	6,910	* 155	6,760	80	--	80	230	105	335		2,050	3,825
1910.....	13,205	13,125	9,295	* 80	9,215	6,910	* 215	6,695	90	--	90	220	135	355		2,075	3,910
1911.....	13,055	12,905	9,020	* 150	8,870	6,680	* 290	6,385	80	--	80	240	140	380		2,020	4,035
1912.....	13,090	12,945	9,330	* 145	9,185	6,990	* 295	6,695	80	--	80	250	150	395		2,015	3,760
1913.....	12,950	12,785	9,170	* 165	9,005	6,835	* 320	6,510	80	--	80	260	155	415		1,995	3,780
1914.....	12,540	12,525	8,565	* 15	8,550	6,290	* 185	6,110	85	--	85	265	170	435		1,925	3,975
1915.....	11,995	12,125	8,020	130	8,150	5,750	* 35	5,715	85	--	85	300	170	465		1,885	3,975
1916.....	12,485	12,650	8,530	165	8,695	6,185	* 10	6,175	90	--	90	325	175	500		1,930	3,955
1917.....	11,980	12,150	7,940	170	8,110	5,570	5	5,575	90	--	90	345	165	515		1,930	4,040
1918.....	11,600	11,780	7,310	180	7,490	4,955	20	4,975	95	--	95	335	160	500		1,920	4,290
1919.....	11,800	11,925	7,725	125	7,850	5,370	* 55	5,315	105	--	105	330	180	510		1,915	4,075
1920.....	11,855	12,050	7,790	195	7,985	5,440	* 55	5,380	80	--	80	375	250	630		1,890	4,065
1921.....	10,850	11,000	6,580	145	6,730	4,505	* 80	4,430	75	--	75	285	225	510		1,720	4,270
1922.....	11,365	11,655	7,605	295	7,895	5,480	* 60	5,420	90	--	90	340	355	695		1,695	3,760
1923.....	11,920	12,260	8,545	340	8,885	6,375	* 75	6,295	115	--	115	350	415	765		1,705	3,375
1924.....	11,640	11,915	8,260	270	8,535	6,140	* 155	5,980	115	--	115	355	425	780		1,655	3,380
1925.....	11,605	11,935	8,380	330	8,710	6,375	* 120	6,255	135	--	135	375	450	825		1,495	3,225
1926.....	11,290	11,665	8,225	370	8,600	6,180	* 145	6,035	145	--	145	415	515	930		1,490	3,065
1927.....	11,005	11,320	7,805	315	8,120	5,790	* 205	5,585	175	(10)(*)	170	405	520	925		1,435	3,200
1928.....	10,915	11,195	7,690	280	7,970	5,710	* 275	5,435	175	* 5	175	415	555	975		1,385	3,225
1929.....	11,220	11,545	8,050	325	8,375	6,020	* 255	5,765	200	* 5	195	455	585	1,040		1,380	3,170
1930.....	10,135	10,505	6,345	375	6,715	4,560	* 175	4,385	155	* 5	150	430	555	985		1,195	3,790
1931.....	9,015	9,340	4,625	325	4,950	3,105	* 150	2,960	125	* 5	120	420	475	895		970	4,390
1932.....	8,375	8,690	3,395	315	3,710	2,100	* 120	1,980	120	(10)(*)	115	345	435	785		830	4,980
1933.....	9,050	9,395	4,045	345	4,390	2,665	* 145	2,520	125	* 5	120	425	490	915		835	5,005
1934.....	9,180	9,520	4,355	345	4,695	2,925	* 165	2,760	130	* 5	125	445	510	960		855	4,825
1935.....	9,605	10,230	5,095	425	5,720	3,565	* 135	3,630	145	* 5	140	485	565	1,050		895	4,510
1936.....	10,255	10,610	5,990	560	6,345	4,295	* 95	3,995	165	* 5	160	555	660	1,215		975	4,265
1937.....	10,445	10,680	6,370	610	6,605	4,505	* 115	4,015	195	* 5	195	645	730	1,375		1,020	4,075
1938.....	9,895	10,260	5,570	475	5,935	3,860	* 70	3,680	195	(10)(*)	195	595	540	1,140		920	4,325
1939.....	10,565	11,100	6,375	535	6,910	4,470	* 60	4,410	210	(10)(*)	210	730	595	1,325		965	4,190
1940.....	10,865	11,800	6,975	400	7,910	4,845	* 35	5,340	235	* 5	230	935	440	1,375		965	3,890
1941.....	11,645	12,155	8,050	650	8,560	5,680	105	5,630	265	* 5	260	1,075	550	1,645		1,030	3,595
1942.....	10,950	12,700	8,085	720	9,835	5,645	170	6,830	305	* 5	300	1,135	555	1,710		1,000	2,865
1943.....	10,345	11,555	7,560	575	8,770	5,325	85	6,020	280	* 15	265	1,030	505	1,565		920	2,785
1944.....	10,370	11,080	7,455	560	8,165	5,115	100	5,385	270	* 10	260	1,165	470	1,615		905	2,915
1945.....	9,580	10,535	6,605	680	7,560	4,365	100	4,745	250	* 10	240	1,140	590	1,730		845	2,975
1946.....	10,380	10,915	7,705	810	8,240	5,295	90	5,200	255	* 5	250	1,260	720	1,895		890	2,675
1947.....	10,775	11,290	8,090	815	8,605	5,500	* 5	5,260	275	* 5	265	1,375	825	2,135		940	2,685
1948.....	11,030	11,725	8,365	1,080	9,060	5,750	190	5,645	290	(10)	295	1,475	885	2,275		850	2,665
1949.....	10,160	11,355	7,340	935	8,535	5,000	140	5,345	320	(10)	320	1,275	790	2,120		745	2,820
1950.....	10,795	12,235	8,525	1,385	9,965	5,905	455	6,330	345	10	350	1,500	925	2,510		770	2,270
1951.....	10,960	11,945	8,730	1,205	9,715	5,780	235	5,895	395	10	405	1,830	955	2,690		730	2,230
1952.....	10,775	11,915	8,750	1,160	9,890	5,820	275	6,140	420	10	430	1,810	875	2,620		700	2,025
1953.....	10,905	12,020	8,835	1,225	9,950	5,710	330	5,915	475	20	500	1,895	870	2,785		750	2,070
1954.....	10,815	12,130	8,810	1,195	10,125	5,650	365	6,070	490	35	520	1,930	795	2,795		740	2,005
1955.....	11,180	12,530	9,340	1,295	10,690	5,810	430	6,250	575	45	625	2,175	820	3,035		780	1,840
1956.....	11,515	12,650	9,685	1,375	10,820	5,935	420	6,220	580	50	630	2,440	905	3,240		730	1,830
1957.....	10,670	11,930	8,930	1,190	10,190	5,375	335	5,815	555	55	610	2,320	800	3,085		680	1,740
1958[11].....	10,235	11,585	8,530	1,230	9,880	5,125	415	5,605	595	60	655	2,140	755	2,950		670	1,705
1959[11].....	11,225	12,640	9,570	1,420	10,985	5,750	515	6,200	745	90	835	2,345	815	3,220		730	1,655
1960[11].....	10,985	12,145	9,485	1,380	10,645	5,440	435	5,700	765	100	865	2,540	845	3,340		740	1,500

[1] Includes all products, except fuelwood, commonly cut from round sections of trees.
[2] Includes small quantities of imported fuelwood.
[3] Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and a miscellaneous assortment of similar items.
[4] Columns may not add to total because of rounding.
[5] Net imports of lumber converted to cubic feet roundwood. Small quantities of imported saw logs (roundwood form) are included under domestic production.
[6] Includes changes in stocks beginning in 1935.
[7] Net imports of veneer logs represent the equivalent net imports of veneer and plywood converted to board feet log scale, and then to cubic feet roundwood. The small volume of veneer logs imported (roundwood form) are included under domestic production.
[8] Includes net pulpwood imports (in roundwood form) and the pulpwood equivalent of the net woodpulp and paper and paperboard imports.
[9] Includes changes in stocks beginning in 1941.
[10] Less than 2.5 million cubic feet.
[11] Preliminary estimates.

* Net exports.

Source: Based on data published by the Departments of Commerce and Agriculture and estimates of the Forest Service.

TABLE 3.--Per capita consumption of timber products in the United States, 1900-1960

Year	All timber products[1]	Industrial wood								Fuelwood	
		Total[1]	Saw logs		Pulpwood		Veneer logs		Other		
	Cubic feet	*Cubic feet*	*Cubic feet*	*Board feet lumber tally*	*Cubic feet*	*Cords*	*Cubic feet*	*Board feet log scale*	*Cubic feet*	*Cubic feet*	*Cords*
1900	156.9	93.8	72.3	--	2.2	(2)	0.1	0.4	19.2	63.1	0.8
1901	156.2	96.3	74.5	--	2.4	(2)	.1	.5	19.2	59.9	.8
1902	155.6	98.7	76.6	--	2.7	(2)	.1	.8	19.3	56.8	.8
1903	154.2	100.2	77.6	--	2.9	(2)	.2	1.1	19.5	54.0	.7
1904	152.6	101.5	78.7	507	3.0	(2)	.2	1.6	19.5	51.1	.7
1905	150.2	101.8	78.8	507	3.1	(2)	.4	2.2	19.6	48.3	.6
1906	152.6	106.9	81.7	526	3.5	(2)	.7	3.9	21.1	45.7	.6
1907	152.5	108.5	79.7	513	3.9	0.1	.7	4.0	24.3	44.0	.6
1908	142.3	97.5	71.7	462	3.2	(2)	.8	4.3	21.8	44.8	.6
1909	144.2	101.9	74.7	481	3.7	(2)	.9	4.8	22.7	42.3	.6
1910	142.0	99.7	72.5	468	3.8	(2)	1.0	5.2	22.5	42.3	.5
1911	137.4	94.5	68.0	438	4.0	.1	.9	4.7	21.5	43.0	.6
1912	135.8	96.4	70.3	452	4.1	.1	.8	4.8	21.1	39.5	.5
1913	131.5	92.6	67.0	431	4.3	.1	.8	4.9	20.5	38.9	.5
1914	126.4	86.3	61.7	397	4.4	.1	.9	5.0	19.4	40.1	.5
1915	120.6	81.1	56.9	366	4.6	.1	.8	5.1	18.8	39.6	.5
1916	124.1	85.3	60.6	390	4.9	.1	.9	5.2	18.9	38.8	.5
1917	117.5	78.4	53.9	347	5.0	.1	.9	5.2	18.7	39.1	.5
1918	112.7	71.7	47.6	306	4.8	.1	.9	5.4	18.4	41.1	.5
1919	113.5	74.7	50.6	325	4.9	.1	1.0	5.5	18.2	38.8	.5
1920	113.1	75.0	50.5	326	5.9	.1	.8	4.6	17.7	38.2	.5
1921	101.4	62.0	40.8	263	4.7	.1	.7	3.7	15.9	39.4	.5
1922	105.9	71.7	49.2	317	6.3	.1	.8	4.7	15.4	34.2	.5
1923	109.6	79.4	56.3	362	6.8	.1	1.0	5.8	15.2	30.2	.4
1924	104.4	74.8	52.4	337	6.8	.1	1.0	6.0	14.5	29.6	.4
1925	103.1	75.2	54.0	347	7.1	.1	1.2	6.3	12.9	27.8	.4
1926	99.4	73.3	51.4	330	7.9	.1	1.2	7.2	12.7	26.1	.3
1927	95.1	68.2	46.9	302	7.8	.1	1.4	8.0	12.1	26.9	.4
1928	92.9	66.1	45.1	290	8.1	.1	1.5	8.5	11.5	26.8	.4
1929	94.8	68.8	47.3	305	8.5	.1	1.6	9.0	11.3	26.0	.3
1930	85.3	54.5	35.6	229	8.0	.1	1.2	7.2	9.7	30.8	.4
1931	75.3	39.9	23.9	153	7.2	.1	1.0	5.5	7.8	35.4	.5
1932	69.6	29.7	15.9	102	6.3	.1	.9	5.5	6.7	39.9	.5
1933	74.8	35.0	20.1	130	7.3	.1	1.0	5.4	6.6	39.8	.5
1934	75.3	37.1	21.8	141	7.6	.1	1.0	5.8	6.8	38.2	.5
1935	80.4	45.0	28.5	183	8.3	.1	1.1	6.3	7.0	35.5	.5
1936	82.8	49.5	31.2	201	9.5	.1	1.2	7.4	7.6	33.3	.4
1937	82.9	51.3	31.2	201	10.7	.1	1.5	8.5	7.9	31.6	.4
1938	79.0	45.7	28.3	182	8.8	.1	1.5	8.9	7.1	33.3	.4
1939	84.8	52.8	33.7	217	10.1	.1	1.6	9.1	7.4	32.0	.4
1940	89.3	59.9	40.4	260	10.4	.1	1.7	10.2	7.3	29.4	.4
1941	91.1	64.2	42.2	271	12.3	.2	1.9	11.5	7.7	26.9	.4
1942	94.1	72.9	50.6	325	12.7	.2	2.2	12.6	7.4	21.2	.3
1943	84.5	64.1	44.0	284	11.4	.1	1.9	11.1	6.7	20.4	.3
1944	80.1	59.0	38.9	250	11.7	.2	1.9	10.6	6.5	21.1	.3
1945	75.3	54.0	33.9	219	12.4	.2	1.7	9.7	6.0	21.3	.3
1946	77.2	58.3	36.8	237	13.4	.2	1.8	10.4	6.3	18.9	.3
1947	78.3	59.7	36.5	235	14.8	.2	1.8	10.6	6.5	18.6	.2
1948	80.0	61.8	38.5	248	15.5	.2	2.0	11.8	5.8	18.2	.2
1949	76.1	57.2	35.8	231	14.2	.2	2.1	12.6	5.0	18.9	.3
1950	80.7	65.7	41.7	268	16.5	.2	2.3	13.6	5.1	15.0	.2
1951	77.4	62.9	38.2	245	17.4	.2	2.6	15.1	4.7	14.4	.2
1952	75.9	63.0	39.1	252	16.7	.2	2.7	16.1	4.5	12.9	.2
1953	75.3	62.3	37.1	239	17.4	.2	3.1	18.3	4.7	13.0	.2
1954	74.7	62.3	37.4	241	17.2	.2	3.2	18.9	4.6	12.3	.2
1955	75.8	64.7	37.8	244	18.4	.2	3.8	22.3	4.7	11.1	.1
1956	75.2	64.3	37.0	238	19.3	.3	3.7	22.1	4.3	10.9	.1
1957	69.7	59.5	34.0	219	18.0	.2	3.6	21.1	4.0	10.2	.1
1958[3]	66.5	56.7	32.2	207	16.9	.2	3.8	23.4	3.8	9.8	.1
1959[3]	71.4	62.0	35.0	225	18.2	.2	4.7	27.9	4.1	9.3	.1
1960[3]	67.3	59.0	31.6	203	18.5	.2	4.8	28.5	4.1	8.3	.1

[1] Data may not add to totals because of rounding.
[2] Less than one-tenth of a cord.
[3] Preliminary estimates.

Source: Based on data published by the Departments of Commerce and Agriculture and estimates of the Forest Service.

TABLE 4.--Stumpage prices for selected species, 1910-1960

(Dollars per thousand board feet)

Year and quarter	Douglas-fir[1]	Southern pine[2]	Sugar pine[3]	Ponderosa pine[3]
1910	2.20	1.50	4.30	3.60
1911	2.30	2.80	2.50	2.50
1912	2.30	1.50	3.50	2.70
1913	1.70	1.70	3.30	2.20
1914	1.60	2.90	3.00	2.00
1915	2.90	2.10	3.40	2.50
1916	1.20	3.20	3.50	2.90
1917	1.60	3.40	2.80	2.20
1918	1.80	3.00	3.40	2.70
1919	2.40	3.70	3.40	3.00
1920	1.80	4.40	5.00	3.70
1921	1.90	3.70	4.20	3.20
1922	2.50	2.80	3.80	4.00
1923	2.50	3.00	4.40	3.90
1924	2.20	3.50	4.20	3.50
1925	2.10	3.20	4.40	3.60
1926	2.20	3.60	4.50	3.70
1927	2.50	3.50	4.00	3.40
1928	2.90	3.60	3.20	2.50
1929	2.70	3.50	4.60	3.60
1930	3.30	3.20	6.30	3.60
1931	2.90	3.40	4.60	4.20
1932	1.70	2.80	3.70	2.60
1933	1.20	2.70	--	--
1934	1.50	2.90	3.50	2.50
1935	1.70	4.50	3.10	2.40
1936	2.10	--	2.80	2.20
1937	1.60	5.30	2.80	2.20
1938	2.50	7.30	3.50	2.50
1939	--	5.80	3.10	2.40
1940	2.30	4.50	3.00	2.20
1941	3.60	10.80	3.40	2.60
1942	--	8.90	4.80	2.70
1943	--	8.70	4.20	5.00
1944	5.20	10.90	5.20	4.00
1945	5.00	9.30	7.30	5.60
1946	6.60	8.90	7.20	5.80
1947	9.90	10.90	12.50	8.30
1948	19.90	16.40	16.20	14.60
1949	11.10	19.70	18.90	17.60
1950	16.40	26.70	25.00	18.30
1951	25.40	34.60	40.40	33.60
1952	25.80	38.50	36.40	27.40
1953	20.20	34.20	30.20	25.90
1954	16.20	29.70	31.20	27.20
1955	28.90	32.00	30.00	26.10
1956	37.70	37.40	34.90	27.20
1957	26.20	31.50	30.00	24.20
1958	21.80	31.10	23.50	19.10
1959	36.80	35.20	26.70	20.60
First quarter	35.40	34.00	27.70	22.00
Second quarter	38.40	35.40	24.50	19.20
Third quarter	35.30	36.60	28.00	21.30
Fourth quarter	36.20	35.60	26.50	19.80
1960				
First quarter	37.10	36.70	36.60	22.70
Second quarter	32.30	35.60	25.50	21.60

[1] 1910-31 national-forest timber sales, all species Washington and Oregon; 1932-41 all species western Washington and western Oregon; 1944-56, national-forest and Bureau of Land Management sales Douglas-fir only in western Washington and western Oregon; 1957-60 national-forest sales, Douglas-fir only in western Washington and western Oregon. All U. S. Forest Service national-forest prices in this table are the bid prices for timber sold on a Scribner C log scale basis, including Knutsen-Vandenberg Act deposits for stand improvement but excluding cooperative deposits and slash-disposal payments.

[2] 1910-34 stumpage prices of privately owned second-growth southern pine timber; 1935-49 national-forest timber sales all species; 1950-60 national-forest timber sales pine only.

[3] 1910-60 national-forest timber sales, California.

TABLE 5.--Stumpage prices for sawtimber sold from national forests, by selected species and region, 1959[1]

Species and region[2]	Volume[3]	Value[4]	Average price per M bd. ft.
	Thousand board feet	*Dollars*	*Dollars*
Douglas-fir (West side):			
California[5]	136,506	2,596,259	19.02
Pacific Northwest	1,879,974	69,248,974	36.84
Total	2,016,480	71,845,233	35.63
Douglas-fir (East side):			
Northern Rocky Mtn.	284,280	2,241,795	7.89
Rocky Mountain	3,390	15,838	4.67
Southwest	12,210	95,778	7.84
Intermountain	112,137	466,580	4.16
California	162,344	1,941,194	11.96
Pacific Northwest	209,281	2,415,251	11.54
Total	783,642	7,176,436	9.16
Ponderosa pine:			
Northern Rocky Mtn.	108,471	1,840,935	16.97
Rocky Mountain	83,012	1,127,713	13.58
Southwest	135,950	1,505,522	11.07
Intermountain	162,516	2,928,428	18.02
California	439,409	9,029,565	20.55
Pacific Northwest	496,287	10,941,153	22.05
Total	1,425,645	27,373,316	19.20
Sugar or western white pine:			
Northern Rocky Mtn.	122,950	2,799,878	22.77
California	159,747	4,265,746	26.70
Pacific Northwest	45,192	987,174	21.84
Total	327,889	8,052,798	24.56
Lodgepole pine:			
Northern Rocky Mtn.	62,620	424,966	6.79
Rocky Mountain	148,419	1,020,545	6.88
Intermountain	26,733	181,602	6.79
California	2,062	8,520	4.13
Pacific Northwest	4,013	37,112	9.25
Total	243,847	1,672,745	6.86
Western hemlock:			
Northern Rocky Mtn.	33,641	96,551	2.87
California	3,294	27,223	8.26
Pacific Northwest	813,418	9,006,607	11.07
Alaska	106,458	209,548	1.97
Total	956,811	9,339,929	9.76
Cedar:			
Northern Rocky Mtn.	44,517	317,303	7.13
California	44,937	186,119	4.14
Pacific Northwest	108,783	1,377,686	12.66
Total	198,237	1,881,108	9.49
Larch:			
Northern Rocky Mtn.	225,431	2,162,715	9.59
Pacific Northwest	50,751	545,816	10.75
Total	276,182	2,708,531	9.81
Redwood:			
California	262	4,520	17.25
Spruce:			
Northern Rocky Mtn.	135,867	1,515,472	11.15
Rocky Mountain	174,017	1,833,341	10.54
Intermountain	52,371	387,725	7.40
Pacific Northwest	38,334	887,959	23.16
Alaska	58,893	322,949	5.48
Total	459,482	4,947,446	10.77
True fir:			
Northern Rocky Mtn.	127,412	387,171	3.04
Rocky Mountain	28,999	172,835	5.96
Southwest	6,722	50,209	7.47
Intermountain	49,456	225,322	4.56
California	288,473	2,713,921	9.41
Pacific Northwest[6]	297,053	3,407,658	11.47
Total	798,115	6,957,116	8.72
Southern pine:			
Northeast	11,894	233,295	19.61
South	388,759	13,686,827	35.21
Lake and Central	1,447	29,208	20.19
Total	402,100	13,949,330	34.69
Red or eastern white pine:			
Northeast	4,041	79,500	19.67
South	3,704	99,161	26.77
Lake and Central	8,210	204,500	24.91
Total	15,955	383,161	24.02
Jack pine:			
Lake and Central	2,624	43,768	16.68
Eastern hemlock:			
Northeast	5,622	93,212	16.58
South	4,181	46,497	11.12
Lake and Central	4,062	65,465	16.12
Total	13,865	205,174	14.80
White oak:			
Northeast	3,215	62,827	19.54
South	8,579	231,140	26.94
Lake and Central	2,280	43,196	18.95
Total	14,074	337,163	23.96
Red oak:			
Northeast	5,030	84,857	16.87
South	8,141	339,894	41.75
Lake and Central	17,897	202,467	11.31
Total	31,068	627,218	20.19
Yellow birch:			
Northeast	3,912	211,582	54.09
Lake and Central	3,818	288,393	75.54
Total	7,730	499,975	64.68
Maple:			
Northeast	9,221	323,315	35.06
Lake and Central	9,670	280,017	28.96
Total	18,891	603,332	31.94
Yellow poplar, basswood or cucumber:			
Northeast	3,966	112,012	28.24
South	5,958	242,213	40.65
Lake and Central	1,720	46,185	26.85
Total	11,644	400,410	34.39
Not specified by species	184,367	2,681,129	14.54
All species and regions	8,188,910	161,689,838	19.74

[1] Excludes pulpwood and miscellaneous products; also excludes timber sold by land exchanges and from land utilization project lands.
[2] Administrative regions of the Forest Service.
[3] Scribner Decimal C log rule, except in Northeast Region where International 1/4-inch log rule is used.
[4] Includes bid price plus KV payments.
[5] Includes Klamath and Six Rivers National Forests in northwest California.
[6] Includes 35,793 thousand board feet of noble fir @ 14.49 per M.

NOTE: The stumpage prices shown in this table do not necessarily indicate values for any specific tract of public or private timber. Prices received for individual tracts may vary widely because of differences in timber quality, degree of competition, timber accessibility, variations in special costs, methods of allocating overhead costs by species, or other factors.

TABLE 6.--Lumber production, imports, exports, and consumption in the United States, for selected years 1899-1960

Year	Domestic production	Imports	Exports	Stock changes	Apparent consumption	Per capita consumption
	Billion board feet	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Board feet*
1899	35.1	0.7	1.5	--	34.3	458
1905	43.5	.8	1.8	--	42.5	507
1910	44.5	1.0	2.3	--	43.2	468
1915	37.0	1.1	1.3	--	36.8	366
1920	35.0	1.4	1.7	--	34.7	326
1925	41.0	1.8	2.6	--	40.2	347
1930	29.4	1.2	2.4	--	28.2	229
1931	20.0	.7	1.7	--	19.0	153
1932	13.5	.4	1.2	--	12.7	102
1933	17.2	.4	1.3	--	16.3	130
1934	18.8	.3	1.3	--	17.8	141
1935	22.9	.4	1.3	-1.3	23.3	183
1936	27.6	.7	1.3	1.3	25.7	201
1937	29.0	.7	1.4	2.4	25.9	201
1938	24.8	.5	1.0	.7	23.6	182
1939	28.8	.7	1.1	--	28.4	217
1940	31.2	.7	1.0	-3.4	34.3	260
1941	36.5	1.4	.7	1.0	36.2	271
1942	36.3	1.5	.5	-6.5	43.8	325
1943	34.3	.9	.3	-3.9	38.8	284
1944	32.9	1.0	.4	-1.1	34.6	250
1945	28.1	1.1	.4	-1.8	30.6	219
1946	34.1	1.2	.6	1.2	33.5	237
1947	35.4	1.3	1.4	1.5	33.8	235
1948	37.0	1.9	.6	1.9	36.4	248
1949	32.2	1.6	.7	-1.3	34.4	231
1950	38.0	3.4	.5	.2	40.7	268
1951	37.2	2.5	1.0	.8	37.9	245
1952	37.5	2.5	.7	-.3	39.6	252
1953	36.7	2.8	.6	.8	38.1	239
1954	36.4	3.1	.7	-.4	39.2	241
1955	37.4	3.6	.8	-.1	40.3	244
1956	38.2	3.4	.8	.8	40.0	238
1957	34.6	3.0	.8	-.7	37.5	219
1958[1]	33.0	3.4	.7	-.4	36.1	207
1959[1]	37.0	4.1	.8	.4	39.9	225
1960[1]	35.0	3.8	1.0	1.1	36.7	203

[1] Preliminary estimates.

Source: Bureau of the Census, U.S. Department of Commerce (20); Forest Service, U.S. Department of Agriculture.

Note: Estimates of lumber production from 1958-60 are based on data published by the National Lumber Manufacturers Association (6, 7).

TABLE 7.--Estimated lumber production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1960[1]

(Billion board feet)

Year	All regions			North			South			West, total[2]
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	
1899	35.1	8.9	26.2	18.6	6.6	12.0	12.9	2.3	10.7	3.5
1905	43.5	10.5	33.0	20.1	7.3	12.8	16.5	3.3	13.3	6.9
1910	44.5	10.5	34.0	15.6	7.5	8.0	20.0	2.9	17.1	8.9
1915	37.0	7.5	29.5	10.0	4.7	5.3	18.8	2.8	16.0	8.2
1920	35.0	7.4	27.6	6.9	3.8	3.0	16.0	3.5	12.5	12.1
1925	41.0	7.7	33.3	6.0	3.6	2.5	19.6	4.1	15.5	15.3
1930	29.4	6.1	23.2	4.5	2.9	1.6	12.6	3.2	9.4	12.2
1935	22.9	4.7	18.2	3.8	2.4	1.5	10.0	2.3	7.7	9.1
1940	31.2	5.5	25.6	4.6	2.9	1.7	13.3	2.6	10.7	13.2
1941	36.5	6.7	29.9	5.3	3.3	2.0	15.5	3.3	12.2	15.7
1942	36.3	6.8	29.5	5.1	3.2	2.0	15.6	3.6	12.0	15.6
1943	34.3	7.4	26.9	4.9	3.2	1.7	14.3	4.2	10.2	15.0
1944	32.9	7.8	25.2	5.4	3.5	1.9	12.6	4.3	8.3	15.0
1945	28.1	7.0	21.1	4.5	2.8	1.7	11.5	4.1	7.4	12.1
1946	34.1	8.3	25.9	4.9	3.1	1.9	14.7	5.1	9.6	14.4
1947	35.4	7.4	28.0	5.4	3.4	2.0	13.6	4.0	9.6	16.3
1948	37.0	7.4	29.6	6.0	3.4	2.6	13.2	4.0	9.2	17.8
1949	32.2	5.7	26.5	4.1	2.6	1.5	11.6	3.1	8.5	16.5
1950	38.0	7.4	30.6	4.9	3.0	2.0	14.6	4.4	10.2	18.6
1951	37.2	7.7	29.5	5.0	3.3	1.7	13.3	4.4	8.9	18.9
1952	37.5	7.2	30.3	4.1	2.7	1.4	13.7	4.5	9.2	19.7
1953	36.7	7.2	29.5	5.0	3.5	1.5	11.8	3.7	8.1	19.9
1954	36.4	7.1	29.3	4.6	3.0	1.7	11.7	4.1	7.7	20.0
1955	37.4	7.6	29.8	4.5	3.1	1.5	12.1	4.5	7.7	20.7
1956	38.2	8.0	30.2	4.9	3.2	1.7	12.8	4.7	8.2	20.5
1957	34.6	7.5	27.1	4.7	3.3	1.4	11.1	4.1	7.0	18.8
1958[3]	33.0	6.9	26.1	4.4	2.9	1.5	10.8	4.0	6.8	17.8
1959[3]	37.0	7.6	29.4	4.9	3.2	1.7	12.1	4.4	7.7	20.0
1960[3]	35.0	7.0	28.0	4.5	2.9	1.6	11.4	4.1	7.3	19.1

[1] Data may not add to total because of rounding

[2] Practically all softwoods.

[3] Preliminary estimates.

Source: Bureau of the Census, U.S. Department of Commerce (20); Forest Service, U.S. Department of Agriculture.

Note: Estimates for 1958-60 are based on data published by the National Lumber Manufacturers Association (6, 7).

TABLE 8.--Wholesale price indexes for lumber, all commodities and selected construction materials, 1929-1960

(1947-49 = 100)

Year and month	All commodities	Lumber		Structural steel		Paperboard		Structural clay products[1]		Construction materials		Plywood	
		Actual	Relative[2]	Actual	Relative[2]	Actual	Relative[2]	Actual	Relative[2]	Actual	Relative[2]	Actual	Relative[2]
1929	61.9	31.2	50.4	61.6	99.5	44.5	71.9	61.8	99.8	49.7	80.3	--	--
1930	56.1	28.5	50.8	54.8	97.7	37.3	66.5	58.8	104.8	46.8	83.4	--	--
1931	47.4	23.1	48.7	52.2	110.1	31.6	66.7	54.8	115.6	41.2	86.9	--	--
1932	42.1	19.4	46.1	50.8	120.7	31.4	74.6	50.6	120.2	37.2	88.4	--	--
1933	42.8	23.5	54.9	52.2	122.0	41.2	96.3	51.9	121.3	40.1	93.7	--	--
1934	48.7	28.1	57.7	57.0	117.0	47.4	97.3	59.1	121.4	44.9	92.2	--	--
1935	52.0	27.2	52.3	57.8	111.2	41.4	79.6	58.6	112.7	44.4	85.4	--	--
1936	52.5	28.9	55.0	59.7	113.7	41.5	79.0	58.1	110.7	45.1	85.9	--	--
1937	56.1	33.1	59.0	71.1	126.7	48.9	87.2	61.2	109.1	49.6	88.4	--	--
1938	51.1	29.0	56.8	69.7	136.4	41.4	81.0	59.6	116.6	47.0	92.0	--	--
1939	50.1	31.0	61.9	67.4	134.5	42.5	84.8	59.9	119.6	47.1	94.0	--	--
1940	51.1	34.2	66.9	67.4	131.9	48.6	95.1	59.3	116.0	49.4	96.7	--	--
1941	56.8	40.7	71.7	67.4	118.7	54.7	96.3	61.4	108.1	53.7	94.5	--	--
1942	64.2	44.2	68.8	67.4	105.0	56.3	87.7	64.2	100.0	57.4	89.4	--	--
1943	67.0	47.0	70.1	67.4	100.6	60.6	90.4	64.9	96.9	58.0	86.6	--	--
1944	67.6	50.9	75.3	67.4	99.7	62.0	91.7	66.6	98.5	60.1	88.9	--	--
1945	68.8	51.5	74.9	67.4	98.0	64.6	93.9	73.6	107.0	61.3	89.1	--	--
1946	78.7	59.3	75.3	74.4	94.5	71.2	90.5	80.5	102.3	69.1	87.8	--	--
1947	96.4	94.5	98.0	84.5	87.7	99.2	102.9	91.7	95.1	94.0	97.5	95.9	99.5
1948	104.4	107.3	102.8	102.8	98.5	102.0	97.7	102.4	98.1	104.4	100.0	109.0	104.4
1949	99.2	98.2	99.0	112.6	113.5	98.8	99.6	105.9	106.8	102.0	102.8	95.2	96.0
1950	103.1	114.5	111.1	121.0	117.4	105.0	101.8	110.2	106.9	109.5	106.2	106.5	103.3
1951	114.8	123.6	107.7	128.4	111.8	131.8	114.8	117.8	102.6	119.6	104.2	115.1	100.3
1952	111.6	120.5	108.0	131.1	117.5	127.4	114.2	122.0	109.3	118.2	105.9	105.0	94.1
1953	110.1	119.3	108.4	138.2	125.5	124.3	112.9	128.1	116.3	119.9	108.9	109.3	99.3
1954	110.3	117.3	106.3	143.8	130.4	124.5	112.9	133.1	120.7	120.2	109.0	103.1	93.5
1955	110.7	124.4	112.4	151.9	137.2	127.1	114.8	140.1	126.6	125.5	113.4	105.4	95.2
1956	114.3	127.2	111.3	162.9	142.5	134.8	117.9	148.0	129.5	130.6	114.3	101.7	89.0
1957	117.6	119.7	101.8	187.5	159.4	136.3	115.9	154.0	131.0	130.6	111.1	96.4	82.0
1958	119.2	118.0	99.0	196.0	164.4	136.2	114.3	156.5	131.3	130.5	109.5	97.1	81.5
January	118.8	116.5	98.1	192.3	161.9	136.4	114.8	155.3	130.7	130.3	109.7	95.6	80.5
February	119.0	116.3	97.7	192.3	161.6	136.4	114.6	155.3	130.5	130.1	109.3	93.7	78.7
March	119.7	115.9	96.8	192.3	160.7	136.2	113.8	155.5	129.9	129.4	108.1	92.9	77.6
April	119.3	115.9	97.2	192.3	161.2	136.1	114.1	155.5	130.3	129.0	108.1	94.4	79.1
May	119.5	116.7	97.7	192.3	160.9	136.0	113.8	155.6	130.2	129.2	108.1	92.2	77.2
June	119.2	116.8	98.0	192.3	161.3	136.0	114.1	155.6	130.5	129.5	108.6	94.9	79.6
July	119.2	116.7	97.9	192.3	161.3	136.0	114.1	155.6	130.5	129.6	108.7	98.3	82.5
August	119.1	119.0	99.9	199.6	167.6	136.0	114.2	155.6	130.6	130.6	109.7	100.2	84.1
September	119.1	121.0	101.6	199.6	167.6	136.5	114.6	158.2	132.8	132.0	110.8	102.0	85.6
October	119.0	120.8	101.5	199.6	167.7	136.2	114.5	158.2	132.9	132.1	111.0	102.7	86.3
November	119.2	120.2	100.8	199.6	167.4	136.2	114.3	158.4	132.9	132.0	110.7	100.1	84.0
December	119.2	120.1	100.8	199.6	167.4	136.2	114.3	158.8	133.2	132.0	110.7	99.1	83.1
1959[3]	119.5	127.1	106.4	199.6	167.0	136.1	113.9	160.2	134.1	134.6	112.6	101.2	84.7
January	119.5	121.0	101.3	199.6	167.0	136.2	114.0	159.3	133.3	132.4	110.8	99.7	83.4
February	119.5	123.1	103.0	199.6	167.0	136.2	114.0	159.6	133.6	133.3	111.5	103.6	86.7
March	119.6	125.5	104.9	199.6	166.9	136.2	113.9	159.9	133.7	133.8	111.9	104.0	87.0
April	120.0	126.8	105.7	199.6	166.3	136.2	113.5	160.0	133.3	134.7	112.3	106.6	88.8
May	119.9	128.9	107.5	199.6	166.5	136.2	113.6	160.1	133.5	135.8	113.3	106.6	88.9
June	119.7	130.4	108.9	199.6	166.8	136.2	113.8	160.4	134.0	135.8	113.5	105.2	87.9
July	119.5	129.9	108.7	199.6	167.0	135.9	113.7	160.6	134.4	135.3	113.2	102.4	85.7
August	119.1	130.3	109.4	199.6	167.6	135.9	114.1	160.5	134.8	135.4	113.7	100.9	84.7
September	119.7	129.3	108.0	199.6	166.8	135.9	113.5	160.5	134.1	135.0	112.8	96.6	80.7
October	119.1	127.9	107.4	199.6	167.6	135.9	114.1	160.4	134.7	135.0	113.4	96.5	81.0
November	118.9	125.8	105.8	199.6	167.9	135.9	114.3	160.6	135.1	134.6	113.2	94.5	79.5
December	118.9	125.9	105.9	199.6	167.9	135.9	114.3	160.7	135.2	134.9	113.5	97.2	81.7
1960:													
January	119.3	126.1	105.7	199.6	167.3	135.9	113.9	161.3	135.2	135.2	113.3	98.2	82.3
February	119.3	126.1	105.7	199.6	167.3	135.9	113.9	161.5	135.4	135.0	113.2	97.0	81.3
March	120.0	125.9	104.9	199.6	166.3	135.9	113.3	161.5	134.6	134.5	112.1	95.9	79.9
April	120.0	125.7	104.8	199.6	166.3	135.9	113.3	161.5	134.6	134.3	111.9	96.1	80.1
May	119.7	124.9	104.3	199.6	166.8	135.9	113.5	161.7	135.1	133.9	111.9	95.7	79.9
June	119.5	123.1	103.0	199.6	167.0	135.9	113.7	161.7	135.3	132.9	111.2	95.5	79.9

[1] Formerly listed as "Brick and tile" by the U.S. Department of Labor.
[2] Obtained by dividing the actual price index by the all commodity price index.
[3] 1959 yearly averages are preliminary.

Source: Bureau of Labor Statistics, U.S. Department of Labor (30).

TABLE 9.--Estimated pulpwood production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1960[1]

(Million cords)

Year	All regions			North			South			West		
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods[2]
1899	1.6	0.5	1.2	1.4	0.5	1.0	--	--	--	0.2	--	0.2
1905	2.5	.4	2.1	2.5	.4	2.1	0.1	--	0.1	--	--	--
1910	3.1	.8	2.3	2.8	.7	2.1	.3	0.1	.1	.1	--	.1
1916	4.4	.7	3.7	4.2	.6	3.6	.2	.2	.1	--	--	--
1920	5.0	.8	4.3	4.5	.5	4.0	.4	.3	.1	.2	--	.2
1925	5.0	.7	4.3	4.1	.4	3.7	.6	.3	.3	.3	--	.3
1930	6.1	.8	5.3	3.9	.4	3.5	1.0	.4	.5	1.2	--	1.2
1935	6.6	.9	5.7	2.9	.3	2.6	1.4	.6	.9	2.2	--	2.2
1941	14.2	1.8	12.3	4.4	1.1	3.3	7.2	.7	6.4	2.6	--	2.6
1942	14.9	1.9	13.0	5.0	1.2	3.8	7.3	.7	6.6	2.6	--	2.6
1943	13.6	1.8	11.8	4.0	1.1	2.9	7.1	.7	6.5	2.5	--	2.5
1944	15.3	2.0	13.4	4.6	1.0	3.5	8.2	1.0	7.2	2.6	--	2.6
1945	15.3	2.2	13.1	4.7	1.1	3.6	8.1	1.1	7.0	2.5	--	2.5
1946	17.0	2.6	14.4	5.6	1.4	4.2	8.8	1.2	7.6	2.6	--	2.6
1947	18.5	2.5	16.0	5.6	1.3	4.3	9.3	1.2	8.1	3.6	--	3.6
1948	20.0	2.5	17.5	5.4	1.2	4.2	11.4	1.3	10.1	3.3	--	3.3
1949	17.6	2.3	15.3	4.6	1.3	3.3	9.9	1.0	8.9	3.1	--	3.1
1950	20.7	2.9	17.8	5.0	1.7	3.3	12.4	1.2	11.2	3.3	--	3.3
1951	25.1	3.8	21.3	6.3	2.2	4.1	14.1	1.6	12.5	4.7	--	4.7
1952	25.1	3.7	21.4	6.0	1.9	4.1	14.6	1.8	12.8	4.5	--	4.5
1953	26.3	4.2	22.1	5.4	2.2	3.2	16.2	2.0	14.2	4.7	--	4.7
1954	27.0	4.8	22.2	5.5	2.6	2.9	16.4	2.2	14.2	5.1	--	5.1
1955	30.9	5.3	25.6	6.3	2.7	3.6	18.4	2.6	15.8	6.2	--	6.2
1956	35.2	6.1	29.1	7.3	3.0	4.3	20.3	2.9	17.4	7.6	0.2	7.4
1957	34.4	6.2	28.2	7.2	3.0	4.2	19.8	3.0	16.8	7.4	.2	7.2
1958	33.2	5.9	27.3	6.4	2.6	3.8	20.2	3.1	17.1	6.6	.2	6.4
1959	36.7	7.6	29.1	6.6	3.2	3.4	22.8	4.1	18.7	7.3	.3	7.0
1960[3]	40.0	8.0	32.0	7.2	3.4	3.8	24.8	4.3	20.5	8.0	.3	7.7

[1] Data may not add to totals because of rounding.
[2] Prior to 1956, these figures include small volumes of hardwoods.
[3] Preliminary estimates.

Source: Bureau of the Census, U.S. Department of Commerce (21); Forest Service, U.S. Department of Agriculture (15).

TABLE 10.--Pulpwood consumption in the United States by source of wood, selected years 1909-1960

(Thousand cords)

Year	Total consumption[1]	Domestic production			Net imports
		Total	Roundwood	Residues	
1909	4,002	3,208	2,959	249	794
1910	4,094	3,147	2,884	263	948
1911	4,328	3,390	3,109	281	938
1914	4,471	3,641	3,387	254	830
1916	5,229	4,445	4,244	201	784
1917	5,480	4,706	4,472	234	774
1918	5,251	4,506	4,351	155	745
1919	5,478	4,446	4,271	175	1,032
1920	6,114	5,015	4,845	170	1,100
1921	4,557	3,740	3,673	67	817
1922	5,549	4,499	4,411	88	1,050
1923	5,873	4,637	4,533	104	1,236
1924	5,768	4,720	4,601	119	1,048
1925	6,094	5,005	4,849	156	1,088
1926	6,766	5,490	5,309	181	1,277
1927	6,751	5,527	5,241	286	1,224
1928	7,160	5,795	5,339	456	1,366
1929	7,645	6,412	5,851	561	1,233
1930	7,196	6,099	5,503	596	1,096
1931	6,723	5,985	5,427	558	738
1932	5,633	4,891	4,450	441	742
1933	6,582	5,964	5,484	480	618
1934	6,797	5,980	5,744	236	817
1935	7,628	6,591	6,298	293	1,037
1936	8,716	7,527	7,197	330	1,189
1937	10,394	8,895	8,330	565	1,499
1938	9,194	7,953	7,722	231	1,241
1939	10,816	9,735	9,416	319	1,081
1940	13,743	12,369	12,094	275	1,374
1941	16,579	14,176	13,951	225	2,208
1942	17,275	14,902	14,702	200	2,158
1943	15,645	13,580	13,391	189	1,676
1944	16,758	15,349	15,062	287	1,630
1945	16,913	15,253	14,803	450	1,688
1946	17,818	16,982	16,382	600	1,942
1947	19,714	18,542	17,792	750	1,998
1948	21,189	20,026	19,101	925	2,268
1949	19,945	17,619	16,544	1,075	1,639
1950	23,627	20,712	19,462	1,250	1,807
1951	26,522	25,128	23,728	1,400	2,637
1952	26,476	25,065	23,497	1,568	2,293
1953	28,140	26,319	24,594	1,725	1,537
1954	29,436	26,972	25,072	1,900	1,583
1955	33,356	30,948	28,273	2,675	1,869
1956	35,749	35,196	31,696	3,500	1,880
1957	35,746	34,422	30,145	4,277	1,759
1958	35,248	33,239	27,818	5,421	1,331
1959	38,691	36,716	30,476	6,240	1,227
1960[2]	40,690	40,000	33,000	7,000	1,290

[1] Includes changes in stocks beginning in 1941.
[2] Preliminary estimates.

Source: Bureau of the Census, U.S. Department of Commerce; Forest Service, U.S. Department of Agriculture; and American Pulpwood Association.

TABLE 11.--Pulpwood prices at local delivery points, 1940-1960

(Dollars per standard cord, including bark)

Year	Southern pine	Spruce	Aspen
1940	4.20	9.00	4.25
1941	4.60	10.50	4.75
1942	6.00	12.25	6.90
1943	7.20	14.75	8.75
1944	8.20	15.00	9.00
1945	8.40	15.00	9.60
1946	10.10	16.50	10.00
1947	11.00	23.75	11.50
1948	11.70	22.25	12.00
1949	11.00	18.50	9.25
1950	11.90	19.50	9.50
1951	13.80	22.50	10.50
1952	13.90	25.00	12.25
1953	13.90	23.25	12.00
1954	14.00	24.25	12.50
1955	14.40	24.75	11.50
1956	15.40	26.00	12.25
1957	15.50	26.00	11.75
1958	15.60	26.25	12.00
1959	16.00	26.25	11.50
1960[1]	16.50	26.75	12.00

[1] Preliminary estimates.

Source: Southern pine, Forest Service, U.S. Department of Agriculture; spruce and aspen, University of Wisconsin, Extension Forestry Office (35).

TABLE 12.--Woodpulp mills in the United States under construction and announced, August 1960

Plant name	Plant status	Plant location	Mill capacity per 24 hours
			Tons
NORTH			
C. Huebert Ltd.	Announced	Boonville, Mo.	50
Logan-Long Co.	Conversion[1]	Franklin, Ohio	90
Masonite Corp.	Announced	Towanda, Pa.	400
Weston Paper Co.	Conversion[1]	Terre Haute, Ind.	135
SOUTH			
Bowaters Board Co.	Under construction.	Catawba, S. C.	175
Continental Can Co.	--	Augusta, Ga.	350
Dierks Forests, Inc.	Announced	Broken Bow, Okla.	30
Dixie Land and Lumber Co.	do.	Phoenix City, Ala.	300
Florida Gulf Fibre Co.	--	Port St. Joe, Fla.	450
Lumberton Pulp Co.	--	Lumberton, Miss.	100
Noralyn Paper Mills, Inc.	--	Baton Rouge, La.	150
Southern Land, Timber and Pulp Co.	Announced	Cedar Springs, Ga.	700 - 800
WEST			
Georgia-Pacific Corp.	Announced	Eureka, Calif.	--
Menasha Woodenware Corp.	Under construction.	North Bend, Oreg.	100
Simpson Timber Co.	Announced	Eureka, Calif.	--
Southwest Forest Products Industries of Phoenix	do.	Snow Flake, Ariz.	350

[1] Converting from straw to wood.

Source: Forest Service, U. S. Department of Agriculture.

TABLE 13.--Production[1] of veneer logs and bolts in the United States, selected years, 1905-1960

(Million board feet, log scale)

Year	All species	Softwoods	Hardwoods
1905	181	13	168
1906	329	52	277
1907	349	39	310
1908	383	51	332
1909	436	56	380
1910	477	49	428
1911	445	51	394
1919	577	93	484
1921	400	70	330
1923	646	151	495
1925	735	194	541
1927	962	290	672
1929	1,113	394	719
1931	696	228	468
1933	700	282	418
1935	824	340	484
1937	1,114	460	654
1939	1,194	544	650
1942	1,736	797	939
1943	1,594	659	935
1944	1,533	647	886
1945	1,404	546	858
1947	1,570	751	819
1951	2,271	1,232	1,039
1952	2,467	1,548	919
1953	2,815	1,861	954
1954	2,894	1,978	916
1955	3,433	2,431	1,002
1956	3,444	2,493	951
1957	3,307	2,455	852
1958	3,741	2,884	857
1959	4,467	3,427	1,040
1960[2]	4,615	3,600	1,015

[1] Includes small volumes of imported logs.
[2] Preliminary estimates.

Source: Bureau of the Census, U.S. Department of Commerce (19, 22); Forest Service, U.S. Department of Agriculture.

TABLE 14.--Supplies, requirements, and prices, rosin by types selected crop years beginning April 1, 1930, and annually, 1948-60

(520-lb. drums)

Crop year (beginning April 1) and Commodity and type	Supply				Requirements			Carry-out stocks[1]	Average price per 100 lbs. net[5]
	Carry-in stocks[1]	Production	Imports	Total supply	Domestic	Export	Total		
1930:	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Dollars*
Gum	(2)	1,620,726	725	(2)	[3] 605,093	834,907	[3] 1,440,000	(2)	2.18
S. D. wood	(2)	351,134	0	(2)	[3] 204,782	140,603	345,385	(2)	--
Total	487,200	1,971,860	725	2,459,785	809,875	975,510	1,785,385	674,400	--
1935:									
Gum	(2)	1,360,950	2,290	(2)	[3] 789,648	740,352	[3] 1,530,000	(2)	1.97
S. D. wood	(2)	460,243	0	(2)	[3] 240,784	223,198	463,982	(2)	--
Total	783,144	1,821,193	2,290	2,606,627	1,030,432	963,550	1,993,982	612,645	--
1940:									
Gum	1,127,719	938,911	1,788	2,068,418	525,494	220,337	745,831	1,322,587	1.98
S. D. wood	127,798	778,581	0	906,379	526,165	203,473	729,638	176,741	--
Total	1,255,517	1,717,492	1,788	2,974,797	1,051,659	423,810	1,475,469	1,499,328	--
1945:									
Gum	265,881	694,476	9,795	970,152	627,294	105,354	732,648	237,504	6.50
S. D. wood	122,385	757,560	0	879,945	640,095	101,456	741,551	138,394	--
Total	388,266	1,452,036	9,795	1,850,097	1,267,389	206,810	1,474,199	375,898	--
1948:									
Gum	162,090	921,220	1,071	1,084,381	370,583	236,228	606,811	477,570	7.39
S. D. wood	115,890	1,154,890	0	1,270,780	864,071	266,049	1,130,120	140,660	--
Total	277,980	2,076,110	1,071	2,355,161	1,234,654	502,277	1,736,931	618,230	--
1949:									
Gum	477,570	924,900	4,229	1,406,699	347,152	256,927	604,079	802,620	6.47
S. D. wood	140,660	1,098,610	0	1,239,270	842,512	305,098	1,147,610	91,660	--
Tall oil (est.)	0	4,000	0	4,000	0	0	0	4,000	--
Total	618,230	2,027,510	4,229	2,649,969	1,189,664	562,025	1,751,689	898,280	--
1950:									
Gum	802,620	797,620	4,475	1,604,715	550,584	595,591	1,146,175	458,540	6.31
S. D. wood	91,660	1,339,410	0	1,431,070	985,348	345,682	1,331,030	100,040	--
Tall oil (est.)	4,000	35,000	0	39,000	37,000	(4)	37,000	2,000	--
Total	898,280	2,172,030	4,475	3,074,785	1,572,932	941,273	2,514,205	560,580	--
1951:									
Gum	458,540	716,350	1,980	1,176,870	392,190	293,140	685,330	491,540	8.73
S. D. wood	100,040	1,333,040	0	1,433,080	923,479	278,561	1,202,040	231,040	--
Tall oil (est.)	2,000	35,000	0	37,000	30,000	(4)	30,000	7,000	--
Total	560,580	2,084,390	1,980	2,646,950	1,345,669	571,701	1,917,370	729,580	--
1952:									
Gum	491,540	638,360	3,000	1,132,900	312,563	138,577	451,140	681,760	7.53
S. D. wood	231,040	1,082,530	0	1,313,570	917,178	218,062	1,135,240	178,330	--
Tall oil (est.)	7,000	30,000	0	37,000	31,000	(4)	31,000	6,000	--
Total	729,580	1,750,890	3,000	2,483,470	1,260,741	356,639	1,617,380	866,090	--
1953:									
Gum	681,760	531,620	1,410	1,214,790	348,050	132,100	480,150	734,640	7.72
S. D. wood	178,330	1,213,340	0	1,391,670	913,880	384,350	1,298,230	93,440	--
Tall oil (est.)	6,000	35,000	0	41,000	37,000	(4)	37,000	4,000	--
Total	866,090	1,779,960	1,410	2,647,460	1,298,930	516,450	1,815,380	832,080	--
1954:									
Gum	734,640	527,700	390	1,262,730	345,220	208,840	554,060	708,670	7.91
S. D. wood	93,440	1,342,370	0	1,435,810	887,420	458,470	1,345,890	89,920	--
Tall oil (est.)	4,000	50,000	0	54,000	49,000	(4)	49,000	5,000	--
Total	832,080	1,920,070	390	2,752,540	1,281,640	667,310	1,948,950	803,590	--
1955:									
Gum	708,670	452,970	650	1,162,290	406,689	151,091	557,780	604,510	8.45
S. D. wood	89,920	1,369,440	0	1,459,360	945,892	400,598	1,346,490	112,870	--
Tall oil (est.)	5,000	125,000	0	130,000	115,000	(4)	115,000	15,000	--
Total	803,590	1,947,410	650	2,751,650	1,467,581	551,689	2,091,270	732,380	--
1956:									
Gum	604,510	444,590	650	1,049,750	347,450	136,050	483,500	566,250	8.37
S. D. wood	112,870	1,324,220	0	1,437,090	875,260	467,960	1,343,220	93,870	--
Tall oil (est.)	15,000	225,000	0	240,000	210,000	(4)	210,000	30,000	--
Total	732,380	1,993,810	650	2,726,840	1,432,710	604,010	2,036,720	690,120	--

See footnotes at end of table.

TABLE 14.--Supplies, requirements, and prices, rosin by types selected crop years beginning April 1, 1930, and annually, 1948-60--Continued

(520-lb. drums)

Crop year (beginning April 1) and Commodity and type	Supply				Requirements			Carry-out stocks[1]	Average price per 100 lbs. net[5]
	Carry-in stocks[1]	Production	Imports	Total supply	Domestic	Export	Total		
1957:	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Drums*	*Dollars*
Gum	566,250	399,910	400	966,560	283,640	123,470	407,110	559,450	7.90
S. D. wood	93,870	1,195,990	0	1,289,860	798,230	420,890	1,219,120	70,740	--
Tall oil (est.)	30,000	269,270	0	299,270	260,610	([4])	260,610	38,660	--
Total	690,120	1,865,170	400	2,555,690	1,342,480	544,360	1,886,840	668,850	--
1958:									
Gum	559,450	369,350	600	929,400	278,430	101,630	380,060	549,340	8.33
S. D. wood	70,740	1,182,620	0	1,253,360	845,880	342,870	1,188,750	64,610	--
Tall oil	38,660	305,060	0	343,720	252,220	64,450	316,670	27,050	--
Total	668,850	1,857,030	600	2,526,480	1,376,530	508,950	1,885,480	641,000	--
1959:									
Gum	549,340	334,110	2,110	885,560	408,420	305,620	714,040	171,520	9.59
S. D. wood	64,610	1,198,690	0	1,263,300	811,840	396,550	1,208,390	54,910	--
Tall oil	27,050	382,970	0	410,020	305,480	79,840	385,320	24,700	--
Total	641,000	1,915,770	2,110	2,558,880	1,525,740	782,010	2,307,750	251,130	--
1960:									
Gum	171,000	370,000	3,000	544,000	350,000	110,000	460,000	84,000	--
S. D. wood	55,000	1,220,000	0	1,275,000	755,000	445,000	1,200,000	75,000	--
Tall oil	25,000	440,000	0	465,000	335,000	95,000	430,000	35,000	--
Total	251,000	2,030,000	3,000	2,284,000	1,440,000	650,000	2,090,000	194,000	--

[1] Includes CCC loan stocks. These are gross stocks and include rosin sold and awaiting shipment.
[2] No breakdown practicable from existing information.
[3] Estimated.
[4] Prior to 1958, exports of tall oil rosin were combined with steam-distilled wood rosin exports as reported by the Bureau of the Census. Consequently, the estimated domestic consumption of tall oil rosin necessarily included steam-distilled wood rosin to the extent of such tall oil rosin exports.
[5] In drums f. o. b. production points.

Source: Reports of Agricultural Marketing Service, USDA, and Bureau of the Census, Department of Commerce; records of Commodity Stabilization Service, USDA.

TABLE 15.--Supplies, requirements, and prices, turpentine by types selected crop years beginning April 1, 1930, and annually 1948-60

(50-gal. bbls.)

Crop year (beginning April 1) and Commodity and type	Supply				Requirements			Carry-out stocks[1]	Average price per gallon[5]
	Carry-in stocks[1]	Production	Imports	Total supply	Domestic	Export	Total		
1930:	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Dollars*
Gum	(2)	598,769	7,931	(2)	[3] 288,516	309,484	[3] 598,000	(2)	0.333
Wood (total)	(2)	86,533	0	(2)	84,404	17,829	[3] 102,233	(2)	--
S. D.	(2)	76,366	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	3,969	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	6,198	0	(2)	(2)	(2)	(2)	(2)	--
Total	127,000	685,302	7,931	820,233	372,920	327,313	700,233	120,000	--
1935:									
Gum	(2)	497,000	12,495	(2)	[3] 269,918	205,082	[3] 475,000	(2)	.376
Wood (total)	(2)	105,908	0	(2)	[3] 82,326	19,300	[3] 101,626	(2)	--
S. D.	(2)	88,875	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	11,712	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	5,321	0	(2)	(2)	(2)	(2)	(2)	--
Total	191,359	602,908	12,495	806,762	352,244	224,382	576,626	230,136	--
1940:									
Gum	167,943	343,938	16,688	528,569	278,707	103,127	381,834	146,735	.240
Wood (total)	52,324	222,403	0	274,727	183,824	27,728	211,552	63,175	--
S. D.	(2)	161,161	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	54,081	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	7,161	0	(2)	(2)	(2)	(2)	(2)	--
Total	220,267	566,341	16,688	803,296	462,531	130,855	593,386	209,910	--
1945:									
Gum	168,011	244,252	14,932	427,195	301,996	67,111	369,107	58,088	.791
Wood (total)	34,535	243,879	0	278,414	210,419	25,334	235,753	42,661	--
S. D.	(2)	129,101	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	110,262	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	4,516	0	(2)	(2)	(2)	(2)	(2)	--
Total	202,546	488,131	14,932	705,609	512,415	92,445	604,860	100,749	--
1948:									
Gum	87,390	324,330	13,613	425,333	227,287	70,916	298,203	127,130	.428
Wood (total)	107,960	334,810	0	442,770	294,442	45,768	340,210	102,560	--
S. D.	(2)	207,160	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	124,870	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	2,780	0	(2)	(2)	(2)	(2)	(2)	--
Total	195,350	659,140	13,613	868,103	521,729	116,684	638,413	229,690	--
1949:									
Gum	127,130	323,010	14,170	464,310	240,380	99,270	339,650	124,660	.384
Wood (total)	102,560	350,280	0	452,840	315,256	56,284	371,540	81,300	--
S. D.	(2)	199,630	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	147,500	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	3,150	0	(2)	(2)	(2)	(2)	(2)	--
Total	229,690	673,290	14,170	917,150	555,636	155,554	711,190	205,960	--
1950:									
Gum	124,660	271,880	16,771	413,311	239,940	137,771	377,711	35,600	.551
Wood (total)	81,300	436,670	0	517,970	354,117	70,693	424,810	93,160	--
S. D.	(2)	237,080	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	194,180	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	5,410	0	(2)	(2)	(2)	(2)	(2)	--
Total	205,960	708,550	16,771	931,281	594,057	208,464	802,521	128,760	--
1951:									
Gum	35,600	246,460	19,092	301,152	174,571	67,251	241,822	59,330	.763
Wood (total)	93,160	437,500	0	530,660	352,286	43,254	395,540	135,120	--
S. D.	(2)	229,590	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	203,430	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	4,480	0	(2)	(2)	(2)	(2)	(2)	--
Total	128,760	683,960	19,092	831,812	526,857	110,505	637,362	194,450	--
1952:									
Gum	59,330	217,360	19,636	296,326	173,084	43,042	216,126	80,200	.534
Wood (total)	135,120	347,580	0	482,700	294,635	39,115	333,750	148,950	--
S. D.	(2)	175,090	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	169,560	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	2,930	0	(2)	(2)	(2)	(2)	(2)	--
Total	194,450	564,940	19,636	779,026	467,719	82,157	549,876	229,150	--
1953:									
Gum	80,200	177,680	22,830	280,710	156,500	34,880	191,380	89,330	.516
Wood (total)	148,950	360,170	0	509,120	348,470	53,070	401,540	107,580	--
S. D.	(2)	193,090	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	164,220	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	2,860	0	(2)	(2)	(2)	(2)	(2)	--
Total	229,150	537,850	22,830	789,830	504,970	87,950	592,920	196,910	--

See footnotes at end of table.

TABLE 15.--Supplies, requirements, and prices, turpentine by types selected crop years beginning April 1, 1930, and annually 1948-60--Continued

(50-gal. bbls.)

Crop year (beginning April 1) and commodity and type	Supply				Requirements			Carry-out stocks[1]	Average price per gallon[5]
	Carry-in stocks[1]	Production	Imports	Total supply	Domestic	Export	Total		
1954:	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Barrels*	*Dollars*
Gum	89,330	175,940	15,360	280,630	145,950	50,240	196,190	84,440	.519
Wood (total)	107,580	441,860	0	549,440	392,150	65,620	457,770	91,670	--
S. D.	(2)	207,700	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	231,750	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	2,410	0	(2)	(2)	(2)	(2)	(2)	--
Total	196,910	617,800	15,360	830,070	538,100	115,860	653,960	176,110	--
1955:									
Gum	84,440	149,000	18,441	251,881	133,866	45,845	179,711	72,170	.556
Wood (total)	91,670	506,540	0	598,210	442,581	56,119	498,700	99,510	--
S. D.	(2)	201,270	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	302,970	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	2,300	0	(2)	(2)	(2)	(2)	(2)	--
Total	176,110	655,540	18,441	850,091	576,447	101,964	678,411	171,680	--
1956:									
Gum	72,170	143,830	23,270	239,270	129,440	64,700	194,140	45,130	.555
Wood (total)	99,510	501,100	0	600,610	430,680	60,450	491,130	109,480	--
S. D.	(2)	194,750	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	305,310	0	(2)	(2)	(2)	(2)	(2)	--
D. D.	(2)	1,040	0	(2)	(2)	(2)	(2)	(2)	--
Total	171,680	644,930	23,270	839,880	560,120	125,150	685,270	154,610	--
1957:									
Gum	45,130	129,080	14,370	188,580	113,530	32,170	145,700	42,880	.543
Wood (total)	109,480	497,740	0	607,220	451,710	47,290	499,000	108,220	--
S. D.[4]	(2)	185,980	0	(2)	(2)	(2)	(2)	(2)	--
Sulphate	(2)	311,760	0	(2)	(2)	(2)	(2)	(2)	--
Total	154,610	626,820	14,370	795,800	565,240	79,460	644,700	151,100	--
1958:									
Gum	42,880	120,300	22,150	185,330	121,900	30,110	152,000	33,330	.513
Wood (total)	108,220	487,940	0	596,160	453,180	42,410	495,590	100,570	--
S. D.	[3] 83,000	172,600	0	255,600	153,870	25,730	179,600	[3] 76,000	--
Sulphate	[3] 25,220	315,340	0	340,560	299,310	16,680	315,990	[3] 24,570	--
Total	151,100	608,240	22,150	781,490	575,080	72,510	647,590	133,900	--
1959:									
Gum	33,330	107,400	15,440	156,170	94,250	28,970	123,220	32,950	.534
Wood (total)	100,570	529,350	0	629,920	434,480	32,910	467,390	162,530	--
S. D.	[3] 76,000	175,950	0	251,950	130,460	21,490	151,950	[3] 100,000	--
Sulphate	[3] 24,570	353,400	0	377,970	304,020	11,420	315,440	[3] 62,530	--
Total	133,900	636,750	15,440	786,090	528,730	61,880	590,610	195,480	--
1960 (est.):									
Gum	33,000	115,000	12,000	160,000	85,000	20,000	105,000	55,000	--
Wood (total)	162,000	485,000	0	647,000	425,000	50,000	475,000	172,000	--
S. D.	100,000	170,000	0	270,000	140,000	30,000	170,000	100,000	--
Sulphate	62,000	315,000	0	377,000	285,000	20,000	305,000	72,000	--
Total	195,000	600,000	12,000	807,000	510,000	70,000	580,000	227,000	--

[1] Includes CCC loan stocks (beginning 1945). These are gross stocks and include turpentine sold and awaiting shipment.
[2] No breakdown practicable from existing information.
[3] Estimated.
[4] Includes destructively distilled turpentine. This type of turpentine is omitted from data beginning with the 1958 crop year.
[5] Bulk at production points.

Source: Reports of Agricultural Marketing Service, USDA, and Bureau of the Census, Department of Commerce.

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